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UNITED STATES DEPARTMENT OF AGRICULTURE

MISCELLANEOUS PUBLICATION No. 512

WASHINGTON, D. C.

ISSUED FEBRUARY 1943

A GRAPHIC SUMMARY OF FARM CROPS

(Based Largely on the Census of 1940)

Prepared by the
Bureau of Agricultural Economics



ACKNOWLEDGMENTS

The material in this publication was compiled through the assistance of Work Projects Administration Project No. OP 165-2-23-114, supervised by Nettie P. Bradshaw under the general direction of a committee of the Bureau of Agricultural Economics. The membership of the committee is as follows: Richard Been, Harold Breimyer, M. R. Cooper, R. G. Hainsworth, Donald C. Horton, O. R. LeBeau, Arthur G. Peterson, Mark M. Regan, Raymond C. Smith, and Conrad Taeuber, Chairman.

The maps and charts were drafted in the graphic section of the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C., under the supervision of R. G. Hainsworth, who also prepared the text.

This publication supersedes Miscellaneous Publication No. 267.

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FARM CROPS

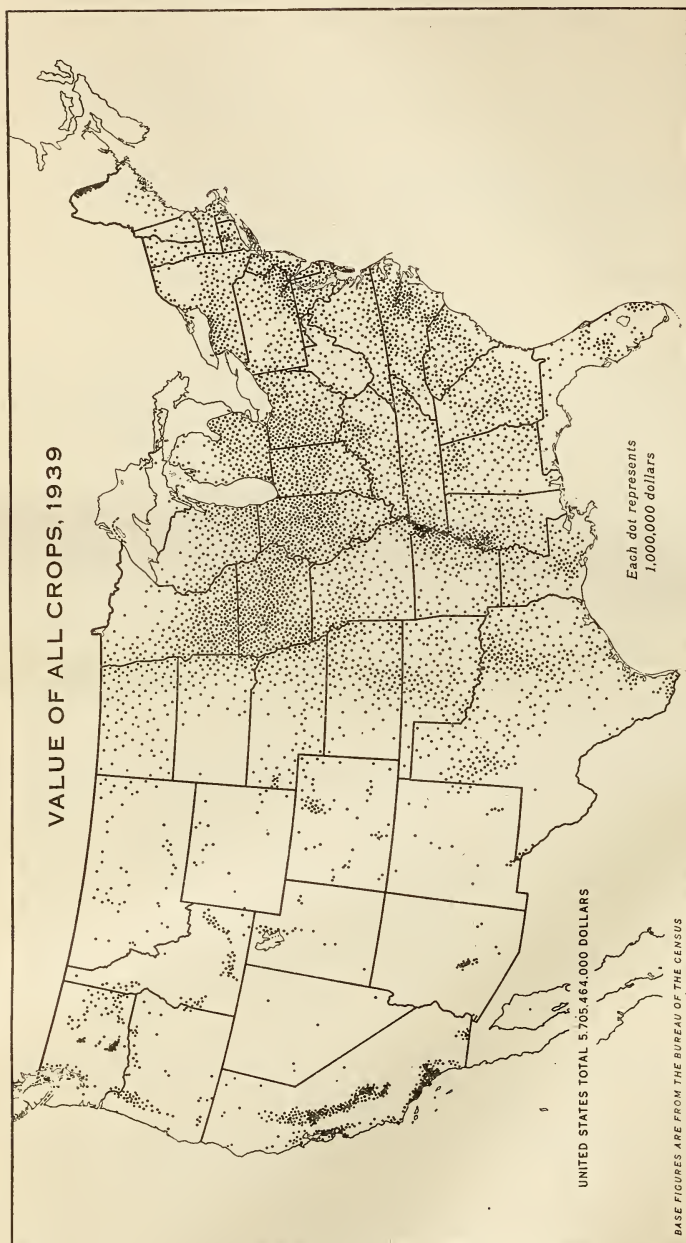
War demands facts and more facts about agriculture. What crops are grown where and in what volume? What is the distribution of livestock production? Where are largest farm labor supplies available? What types of farm machinery are available in various areas of the country? What are the bases for increasing production?

Facts disclosed by the census are suddenly of concrete, immediate need; but for practical use in planning agricultural production they must be interpreted. Graphic summaries of the chief census figures regarding agriculture, designed to bring out certain needed points in the most salient way, are an answer to practical demands in war as well as in peace. Maps, singly or consecutively, not only present facts but also show how acreage and production are affected by economic and climatic factors, by man-made adjustments, by soil damage, and now by the dislocations of war, which were influencing our whole economic structure by the end of 1939.

During the decade covered by the census, acreages and production of farm crops have been drastically affected by the tides of change, thereby requiring continuous adjustments in planning and planting. In 1929, at the peak of urban prosperity, both average consumer buying power and farm prices were relatively high, but by 1932 agriculture was deep in economic depression. Prices for farm commodities were low, whereas high prices were still prevailing for many goods the farmers had to buy. Gradual farm recovery began in 1933 after the adoption of a national farm-adjustment program, accompanied by the revaluation of the dollar. In 1934 the country experienced a severe drought. In 1936, another drought year, the smallest crop since 1881 was harvested.

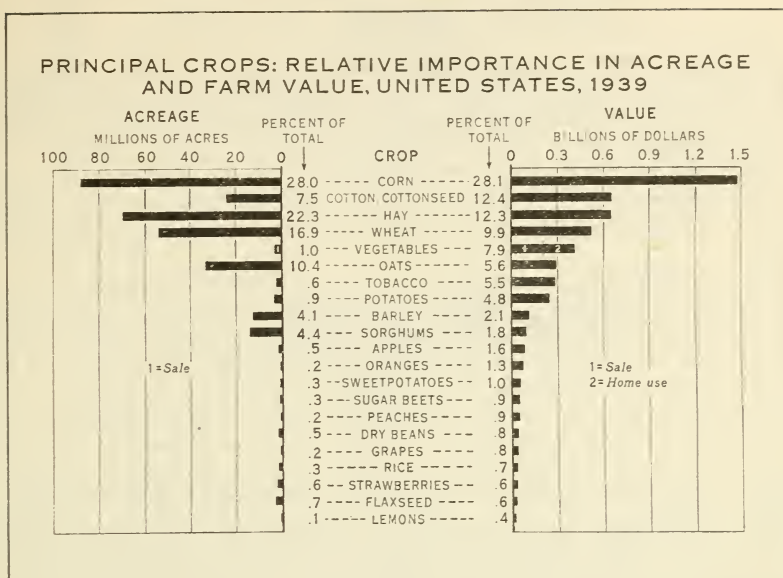
Industrial production in 1937 was 80 percent above the level of 1932, and the wages of the average employed wage earner would buy more in 1937 than at the peak of urban prosperity in 1929.

At the end of 1939 came the impact of the second World War. Even before the United States entered the war in December 1941, an expanded agricultural production program was under way. Swift upward adjustments are now being made in the production of agricultural commodities important in the war, and some contractions are necessary in acreages of less important crops. All of these changes will doubtless be sharply reflected in the next census figures.



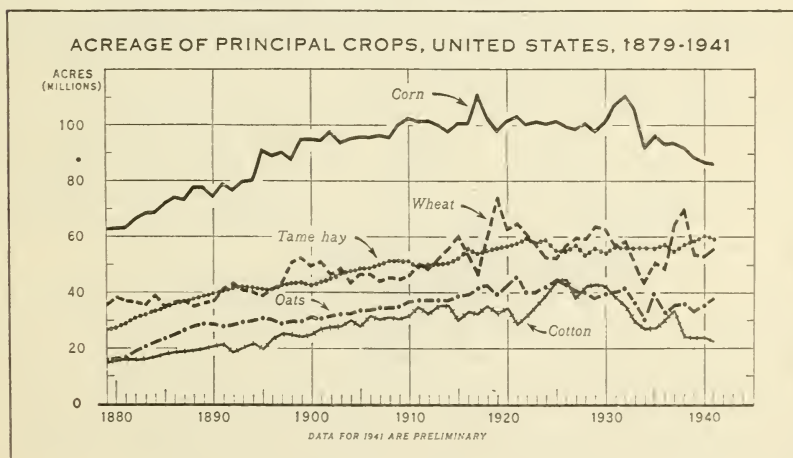
BAE 42224

FIGURE 1.—In 1939 the value of all crops was about 30 percent less than in 1929. Smaller acreages of many important crops and lower prices both contributed to the decrease in value. The North Central States had about 40 percent of the total value, and the South Central States about 20 percent. These States produced the bulk of the cotton, hay, and grain crops, as well as various minor crops. Crops in other States that contributed to the total value are notably the fruit, truck, tobacco, and general crops of the eastern seaboard and adjacent States, and the fruit, vegetable, and nut crops of the fertile valleys of California and the irrigated districts of other Western States.



BAE 42447

FIGURE 2.—The three leading crops—corn, cotton, and hay—constituted over 50 percent of the value and 58 percent of the acreage of all crops. The feed crops—corn, hay, and oats—accounted for 61 percent of the acreage and 46 percent of the total value. Vegetables grown for sale and for home use contributed about 8 percent to the total value of all crops, but acreage of vegetables grown for sale alone amounted to less than 1 percent of the total acreage of all crops. The total value of all crops in 1939 was less than 6 billion dollars, whereas in 1929 crops were worth over 8 billion dollars.



BAE 24776

FIGURE 3.—The total acreage of the principal crops increased about 100 percent from 1879 until the highest acreages were reached between 1917 and 1925, as a result of World War I. However, acreage of tame hay reached a new high in 1940, and still could be considered in an upward trend. Various factors contribute to the general recent downward trend in the different crop acreages—among them a heavy decrease in horse and mule numbers, changes in feed rations, the improved varieties of the different crops producing heavier yields per acre, and reduced total demand for all farm products, partly because exports were sharply reduced from the peaks of the early 1920's.

COTTON, TOBACCO, AND FLAX

The United States is the largest producer of cotton and tobacco in the world, but ranks fourth in the production of flax. In 1939 the Union of Soviet Socialist Republics, India, and Argentina all had larger acreages and production of flax than the United States.

About 43 percent of the world crop of cotton was grown in the United States during the 6-year period 1934-39, whereas the average production for the previous 10 years was about 55 percent of the world total.

The five important commercial types of cotton produced throughout the world in order of quality and spinning value of fiber are sea-island, Egyptian, American upland long staple, American upland short staple, and Asiatic. Practically the entire cotton production of the United States is made up of the American upland long-staple and short-staple types, the latter constituting about 90 percent of the crop. In 1940, about 4,000 bales of sea-island cotton were grown in the Gulf Coast regions of Alabama, Mississippi, Louisiana, Texas, and other States. Egyptian cotton production in the United States is almost entirely confined to Arizona, where nearly 40,000 bales were produced in 1940. The principal uses of cotton now are in connection with the war program. Over 75 percent of the cotton linters in 1941 went into munitions and plastics, and practically all of the 1942 crop is assigned to the same use. Cotton goes to war in the form of tents, mosquito nettings, clothing, bedding, even houses for soldiers, fabrics for airplane wings, and in other uses. The hulls are used principally for camouflage, and to some extent for making rayon, explosives, and plastics.

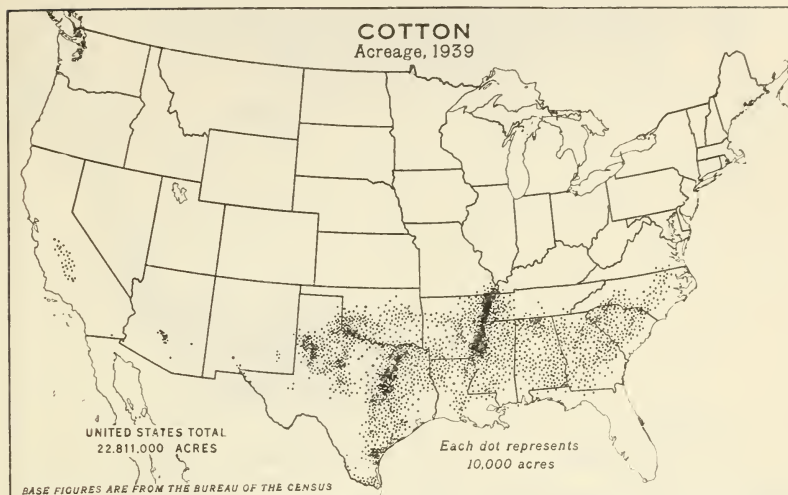
In 1939 the United States produced about one-third of the world tobacco crop. Tobacco culture in the United States is highly specialized and the production of each of several important commercial types is definitely localized, owing primarily to the influences of climate and soil on the properties of the finished leaf.

The various types of tobacco are used for different purposes, such as cigar fillers and wrappers, cigarettes, chewing (cut and plug) and smoking tobacco, snuff, etc. Various tobaccos are blended together in the finished product, as in cigarettes. Smoking and chewing tobacco in various forms are being sent to our fighting forces over the seven seas and the four corners of the earth.

Flax is a cash crop, very little being used on the farm where it is produced. In practice distinct types or varieties of flax are selected, depending on whether seed or fiber is principally desired. In the United States practically the entire flax crop is grown for its seed.

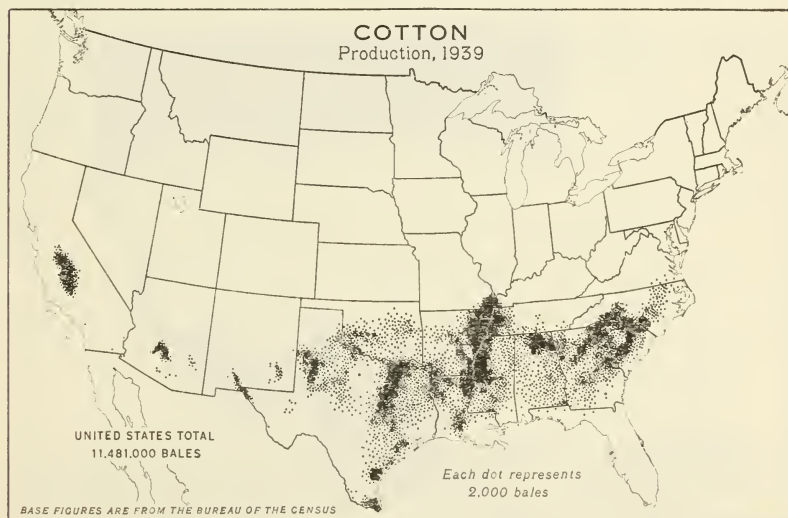
Flaxseed yields 32 to 44 percent oil, based on dry weight, and in commercial crushing this amounts to about 2½ gallons to the bushel. The oil is used in the manufacture of paints and varnishes, linoleum, oilcloth, patent and imitation leather, and other products, all essential war supplies. The meal is used for feeding livestock.

A few thousand acres of fiber flax are grown annually in the Willamette Valley of Oregon. Flax is thickly sown when grown for fiber, in order to obtain small stems without basal branches. This straw has been used in the manufacture of upholstery, insulating material, rugs, twine, and paper. A new industry has been recently developed, the processing of fiber from flax straw for manufacture of cigarette and other high-grade papers.



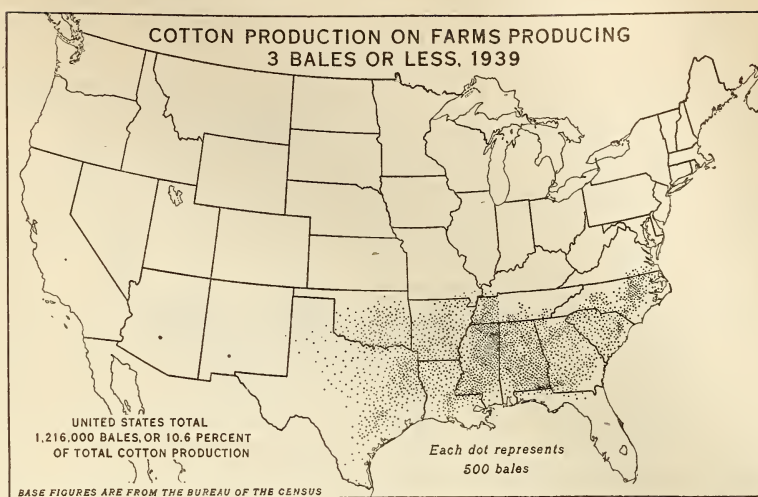
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FIGURE 4.—Acreage of cotton in 1939 was the lowest since 1895. Heavy cuts in acreage under the Agricultural Adjustment Program, year after year, has brought down the acreage to the present low level. An increase in acreage of cotton in various other countries tended toward a decreased demand for American cotton. Planting of cotton begins in February in the southernmost part of the Cotton Belt and moves northward. Along the northern edge of the belt and in the higher altitudes, planting is usually completed in May.



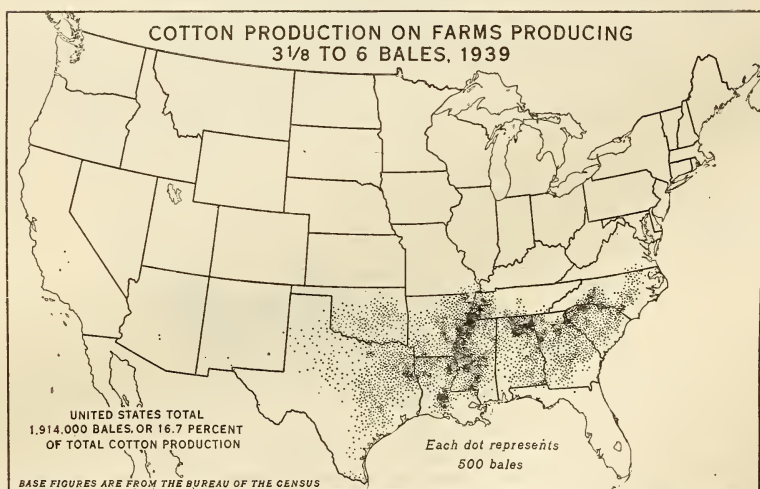
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FIGURE 5.—The production of cotton in 1939 was harvested from the smallest acreage since 1896 and was the smallest crop since 1923, except for 1934, a year of heavy drought, when the production was only 9,472,000 bales. Texas leads in the production of cotton, with 2,724,000 bales; Mississippi is second, 1,533,000 bales; and Arkansas third, 1,351,000 bales. Cotton is grown in the warm, humid States, with the exception of California, Arizona, and New Mexico, where it is irrigated.



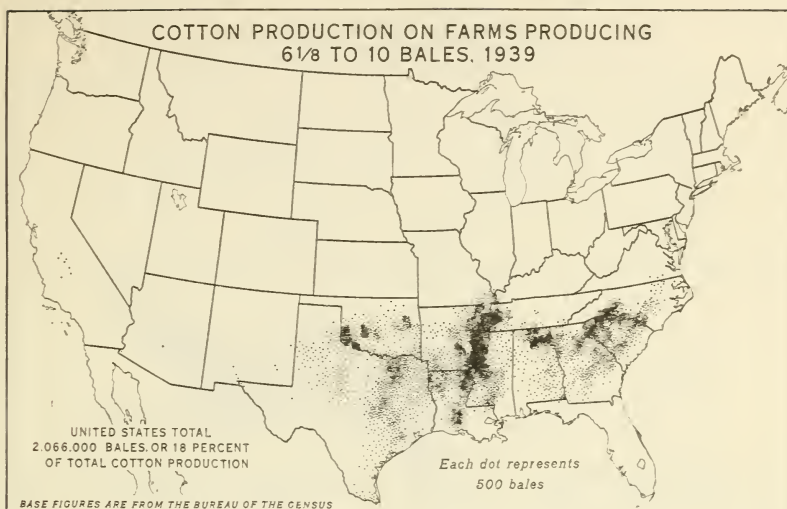
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FIGURE 6.—Production of cotton on farms producing 3 bales or less amounted to 10.6 percent of the total production of cotton from all farms in the United States in 1939. Alabama was the leading State with 16.6 percent of the total production from farms producing 3 bales or less. Mississippi had 16.5 percent, Texas 14.2 percent, and Georgia 11.8 percent. These four States accounted for 59 percent of the total United States cotton produced on farms reporting 3 bales or less.



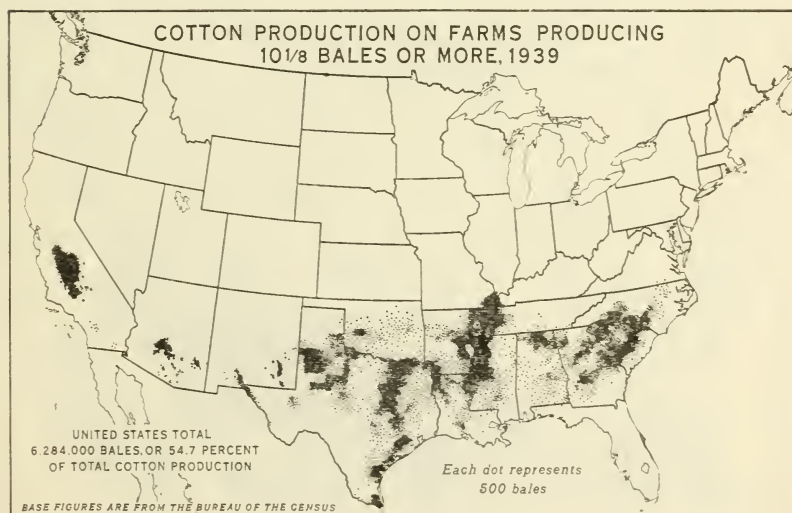
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FIGURE 7.—Cotton produced on farms having a production of $3\frac{1}{8}$ to 6 bales constituted about 16.7 percent of the total cotton produced in the United States in 1939. The production of cotton in Texas on farms having $3\frac{1}{8}$ to 6 bales was 16 percent of the total United States production in this class. Mississippi produced 15 percent, Georgia 11.8 percent, and Alabama 11.2 percent. The production in these four States amounted to 54 percent of the cotton produced on farms having a crop of $3\frac{1}{8}$ to 6 bales.



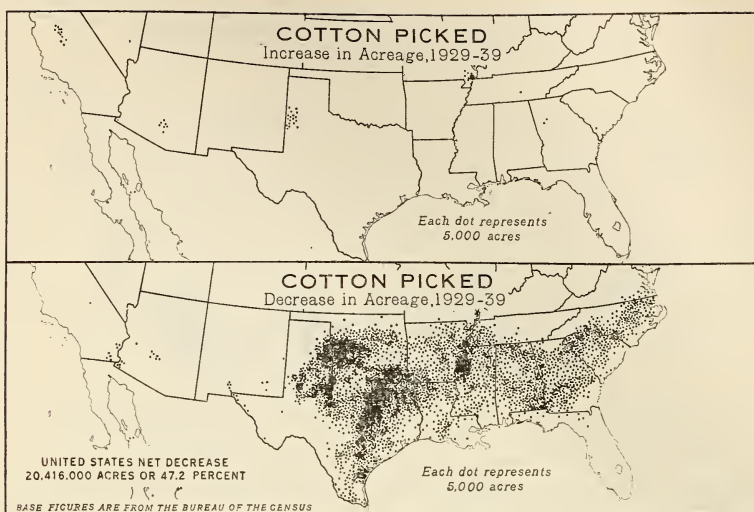
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FIGURE 8.—Farms on which $6\frac{1}{8}$ to 10 bales of cotton were produced reported about 18 percent of the total cotton production on all farms in 1939. About 18 percent of the cotton produced in the $6\frac{1}{8}$ -to-10-bale class interval came from Texas, the leading cotton-producing State. Mississippi ranked second with 17.2 percent, Arkansas had 12.7 percent, and Georgia 9.6 percent. These four largest cotton-producing States reported over 57 percent of the cotton grown on farms producing $6\frac{1}{8}$ to 10 bales of cotton.



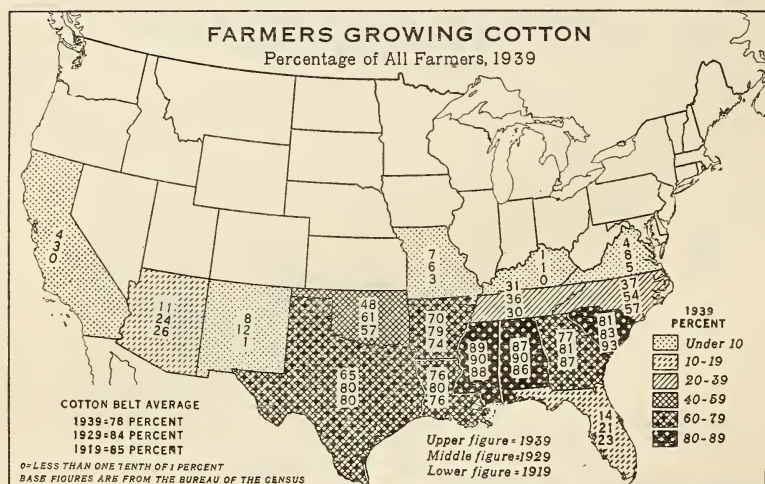
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FIGURE 9.—Nearly 55 percent of all cotton produced in the United States in 1939 was produced on farms reporting a cotton crop of over 10 bales. Texas was the leading State in cotton production on farms with over 10 bales, containing 29.7 percent of the total, Arkansas was next with 12.7 percent, Mississippi had 10.9 percent, and South Carolina and California each had 6.9 percent. In California, 98.6 percent of all cotton produced came from farms with over 10 bales, whereas in South Carolina only 51.3 percent came from such farms.



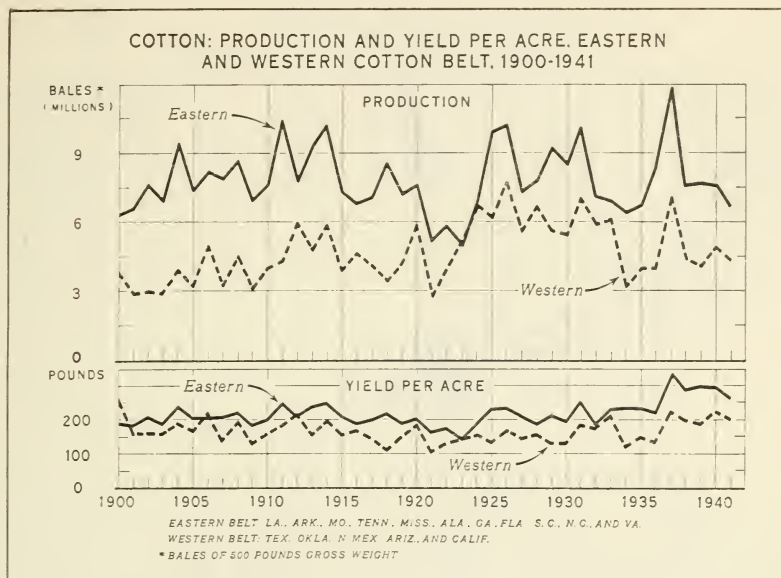
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FIGURE 10.—The heavy decrease of 47 percent in the acreage of cotton picked in 1939 as compared with that picked in 1929 is chiefly the result of acreage reduction under the program of the Agricultural Adjustment Administration. Increases in the acreage of cotton occurred in widely separated areas and in only a few counties. In some of these a variety of cotton was grown in which the acreage was not controlled by the acreage-allotment program.



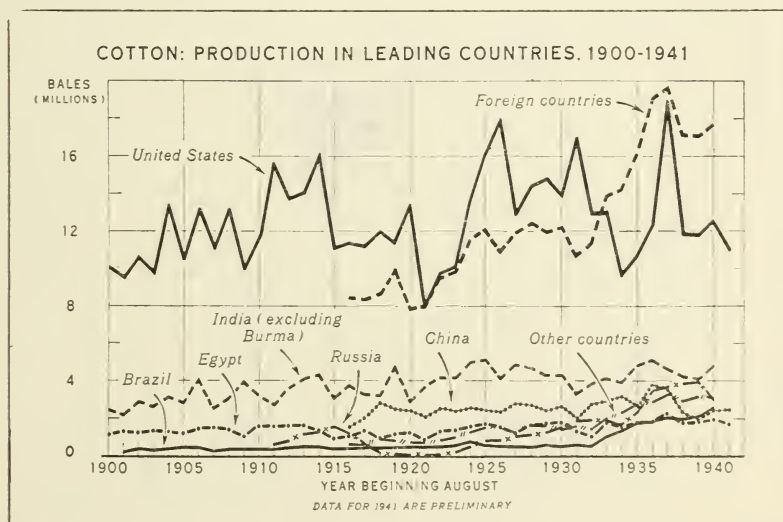
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FIGURE 11.—In 1939 an average of 78 percent of all farmers in the Cotton Belt grew some cotton. From 1929 to 1939 a decrease of about 6 percent occurred. California and Missouri are the only States in which even a small percentage increase in number of farmers growing cotton occurred during that decade, whereas heavy percentage decreases occurred in Texas, Oklahoma, North Carolina, New Mexico, and Florida. Alabama, Mississippi, and South Carolina had the highest percentage of farmers growing cotton in 1939.



BAE 20950

FIGURE 12.—The production of cotton in the eastern Cotton Belt showed an upward trend from 1900 until 1914. From 1915 to 1923 the trend was downward, as boll weevil infestations spread. From 1923 until 1931 the trend was up but declined to a low in 1934 and again increased until 1937, when the largest crop in history was produced. In 1941 the production of cotton had declined to a 1927 level. In recent years the yield of cotton has been higher than at any previous time.



BAE 31211

FIGURE 13.—The World's largest cotton crop is produced in the United States. The production in foreign countries has been sharply upward since 1933, whereas the acreage-adjustment programs and unfavorable weather conditions have held the production in the United States to about 12 million bales, except in 1937 when a heavy crop was produced. Since 1931, trends in the production of cotton have been decidedly upward in Russia, Brazil, Egypt, India, and other countries.

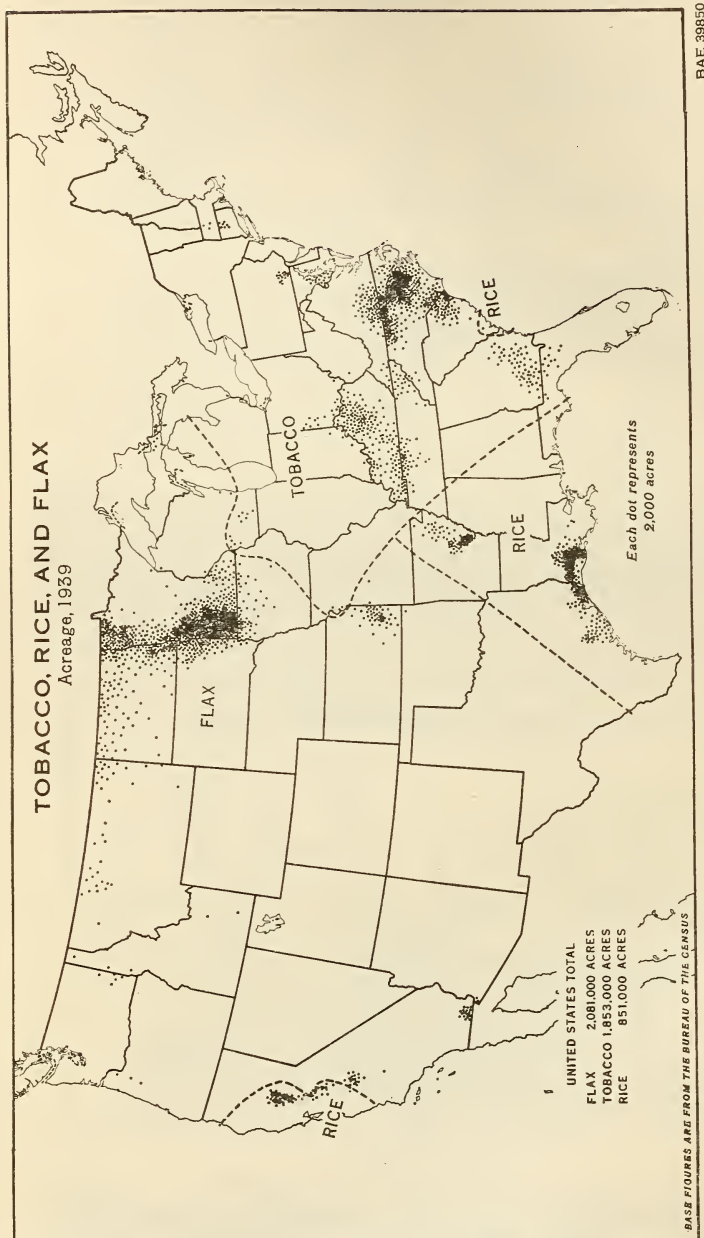
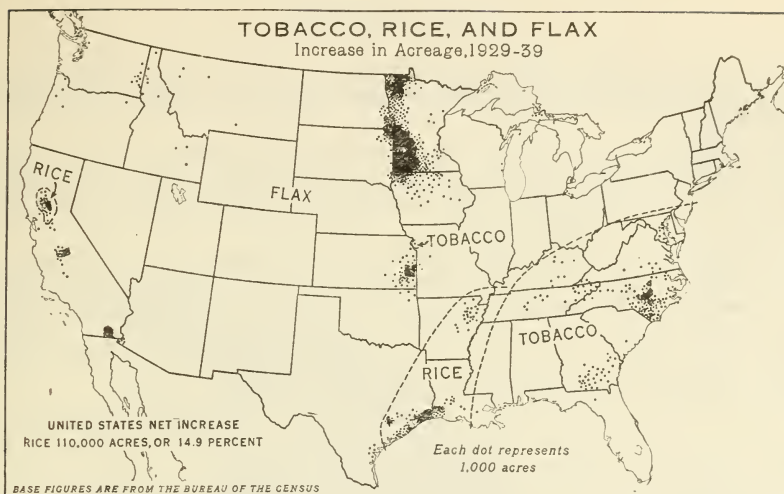
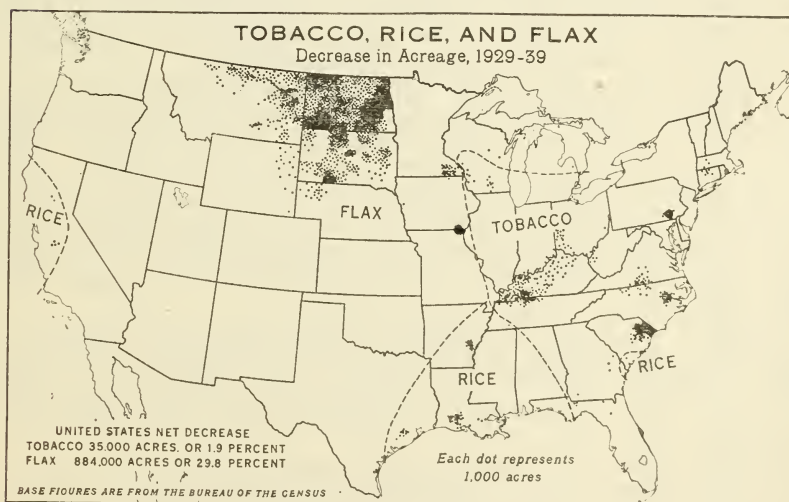


FIGURE 14.—Tobacco, rice, and flax are grown in localized areas. North Carolina is the leading tobacco State, with 775,000 acres; Kentucky is second, with 361,000 acres. In the center of the heavy producing areas tobacco is the principal cash crop. Acreage of rice is confined to the coastal plains of Texas and Louisiana, the lowlands of the Arkansas River, and the adjacent prairie lands of Arkansas, and the Sacramento Valley in California. Rice is the principal food of half the people in the world. Flax is practically all grown in the same area as spring wheat, although some is grown in the valleys of California and in southeastern Kansas. Flax fibers are among the best textile fibers; the oil from the seed is used in industry, and the residue as feed for livestock.



BAE 39949

FIGURE 15.—Between 1929 and 1939 an increase in acreage of tobacco occurred mainly in the flue-cured tobacco areas of North Carolina and southern Georgia. A broad increase in the acreage of rice occurred throughout most of the rice area. A heavy increase in flax occurred in western Minnesota—a very probable result of drought and of shifts made from wheat to flax because of the allotment program. The eastern Kansas flax area increased considerably, and new flax areas were developed in California, Washington, and Idaho.



BAE 39950

FIGURE 16.—The net decrease of about 2 percent in acreage of tobacco between 1929 and 1939 was mainly due to the acreage-curtailment program. All types of tobacco shared in the acreage cut. The decrease in acreage of rice was confined to a few small areas. A decrease of nearly 30 percent in the acreage of flax was due almost entirely to the drought of 1939.

THE CEREALS

The cereal grains that are grown extensively in the United States were harvested from 56 percent of the total crop acreage in both 1929 and 1939.

Commercial oats, barley, and corn are used chiefly as feed for livestock and are called "coarse grains" to distinguish them from wheat, rye, rice, and buckwheat, which are used for food and are generally referred to as "food grains."

Corn is the leading crop in the United States, and is grown in every State. About 85 percent of the corn produced was used as feed for livestock, 3.2 percent went into the wet-process products, 1.7 percent into dry-process products, 1.7 percent into breakfast and other foods, 1.4 percent into alcohol and beverages, and 0.7 percent for seed. The remainder was exported or added to inventory.

Wheat ranks next to corn in importance. About 63.4 percent of the crop was used for food, 16.3 percent for feed, 11.2 percent for seed, and the remainder for exports or inventory.

Oats ranks third as an important cereal crop. Nearly 96 percent of the production of oats for 1935-39 was used for feed, less than 3 percent for food, and the remainder for exports and carry-over.

The average annual production of barley for 1935-39 was about 5 percent of the total production of cereals. Nearly 60 percent of the production was used as feed for livestock; about 28 percent went into the production of malt for alcoholic beverages and other purposes; and the remainder was exported or added to the inventory.

Rice ranks high as a food grain of the peoples of the world but it is relatively unimportant in the United States and makes up less than 1 percent of the production and value of the total cereal crops. During the period 1935-39, about 52 percent of the production of rice was used for food, about 7 percent for feed and seed, and the remainder was exported or shipped to United States territory.

Rye, like rice, is not a relatively important harvested crop in the United States. Rye is one of the best cover crops for situations where soil fertility is low and winter temperatures are extreme. When young rye is turned under, owing to its nitrogen and low fiber content at this stage, it generally increases the yield of crops following. Over half of the rye crop is used for feed and seed and more than half the remainder for flour and the distilling industry. However, rye becomes more important in making bread in a war period when wheat is scarce.

The grain sorghums are valuable for feed grain and roughage for farm and range livestock, and for silage for the dairy and beef industries. Insufficient rainfall and drying winds make it uneconomic to grow corn for this purpose in the Great Plains area where grain sorghums do well.

Buckwheat, the least important of the cereals, grows best where the climate is moist and cool. It will grow on land unsuited to wheat or barley, and produces good yields. Buckwheat is used principally as flour.

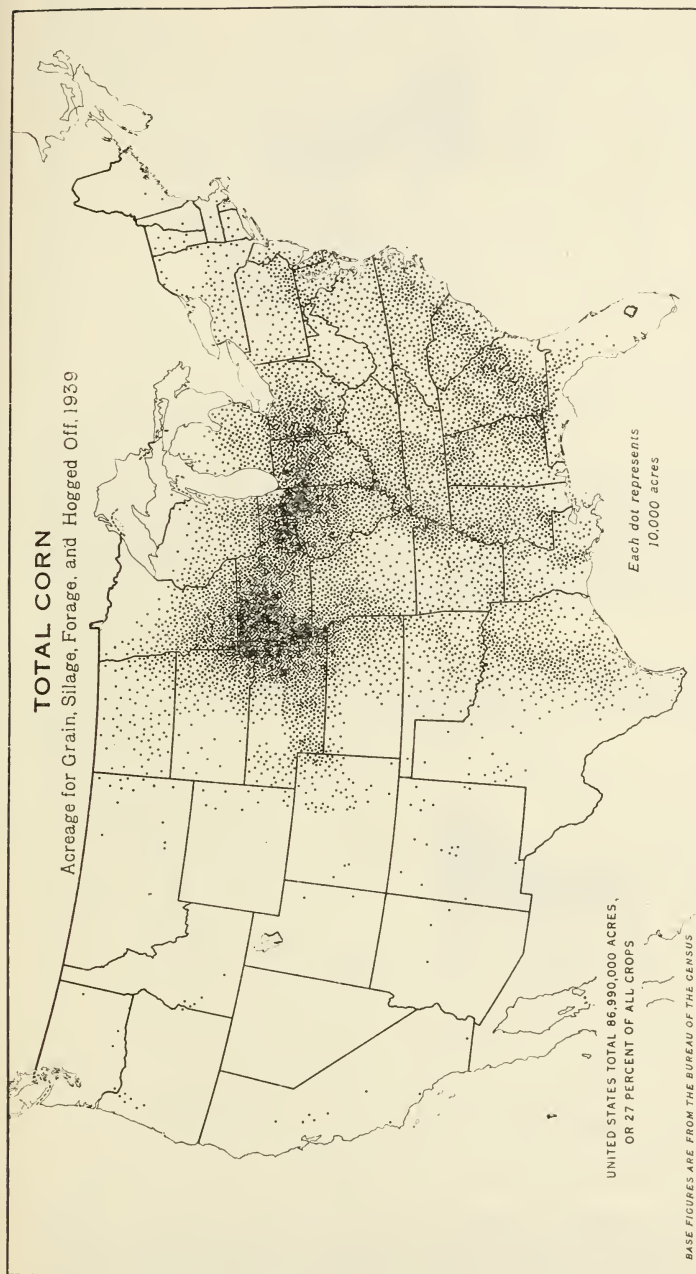
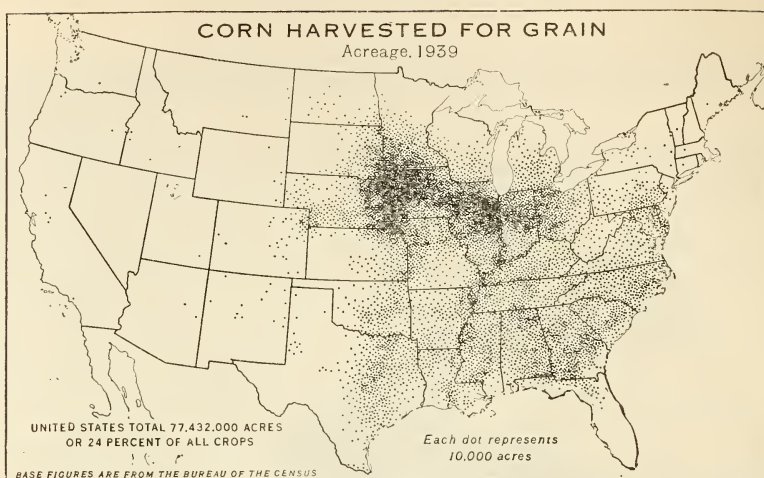
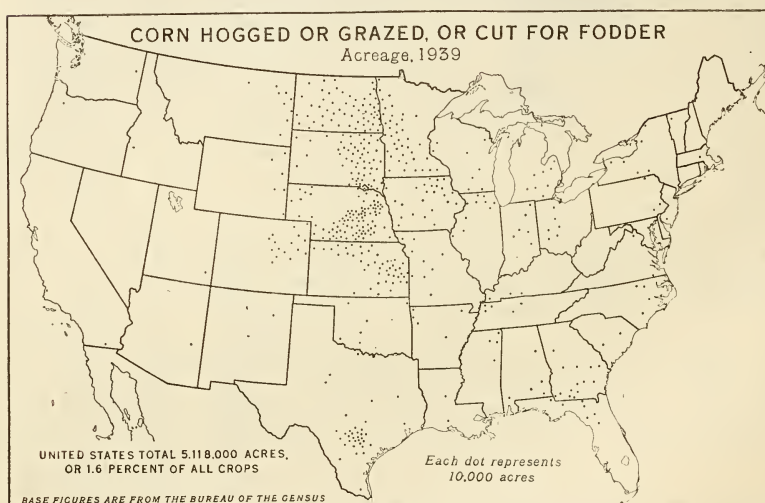


FIGURE 17.—The corn crop of the United States makes up over one-half of the World's annual production. Acreage devoted to corn is about one-sixth of the total land area available for crop production in the United States. Planting of corn begins in the heart of the Corn Belt about May 1, and the average growing season is from 150 to 180 days. Corn is not usually grown where the mean summer temperature is less than 66° F. or where the average night temperature during the growing season is lower than 55°. Profitable corn production requires a fertile, well-drained, loam soil, well supplied with humus that can be worked easily with modern farm machinery. Iowa has the largest acreage of corn, with 9,331,000 acres; Illinois is second with 7,786,000 acres; and Nebraska third with 6,305,000 acres.



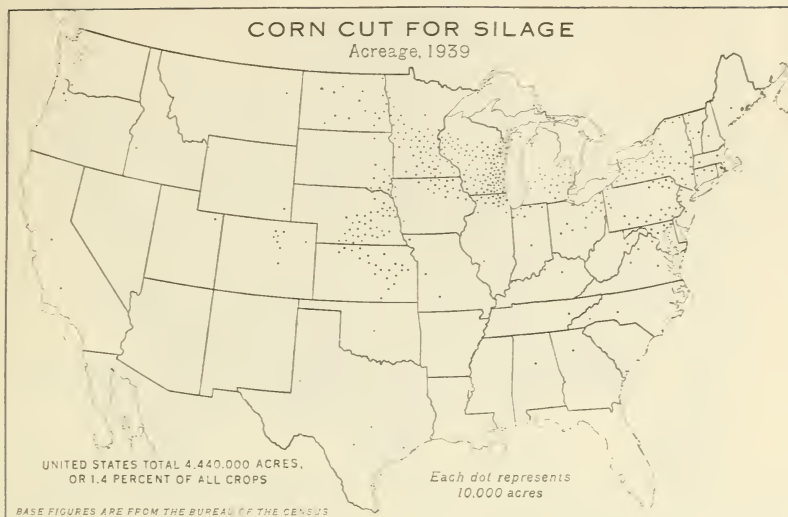
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FIGURE 18.—About 90 percent of the total corn acreage is harvested for grain. Corn is a great feed grain, and is used primarily for feeding hogs, cattle, and poultry. Only a small proportion of the crop is used for manufactured products. Production for grain is concentrated in the North Central States, but corn is also the most important grain in several of the Southern States. The leading States producing corn for grain are Iowa, with 8,900,000 acres; Illinois, 7,511,000 acres; and Nebraska, 5,055,000 acres.



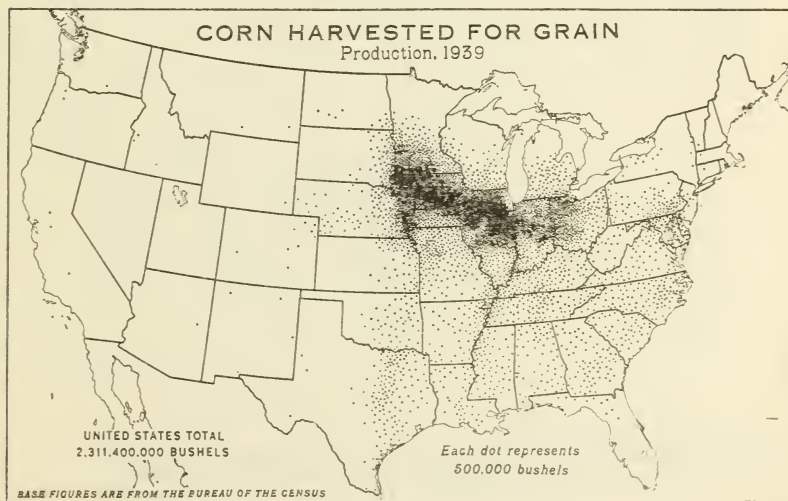
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FIGURE 19.—In the Corn Belt, the Wheat Belt, both spring and winter, and to some extent in the Southern States, many cornfields are harvested by hogs or other livestock. This is an inexpensive method of harvesting and, although the practice is used regularly by some, it is increased when corn prices are low, when corn is inferior in quality, or when yields are small and other methods of harvesting are expensive.



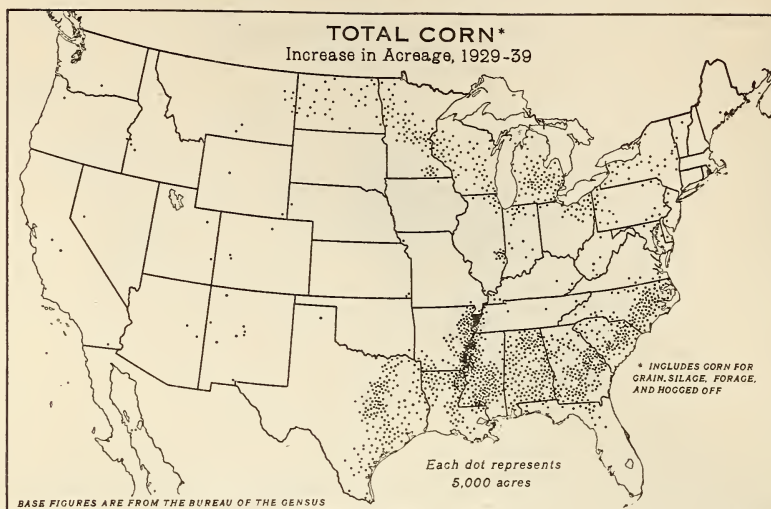
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FIGURE 20.—Corn made into silage is fed principally to dairy cattle during the winter months. Some is fed to beef cattle, and a small quantity to sheep. In 1939, the acreage of corn cut for silage was only about 5 percent of the total acreage of corn and constituted nearly 85 percent of the acreage of crops cut for silage. Wisconsin, the leading dairy State, had the largest acreage of corn cut for silage, 1,014,000 acres. This was more than the dairy States of Minnesota and New York had together.



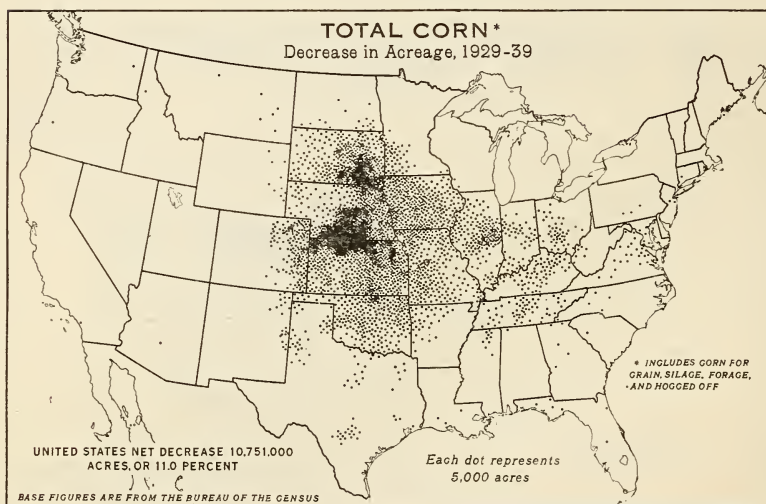
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FIGURE 21.—The production of corn for grain is concentrated in the Corn Belt. About 40 percent of the corn crop of the United States is used as feed for hogs; and probably 50 percent is used on farms as feed for cattle, sheep, horses, and mules, and for other farm uses. Corn is also used industrially in five principal fields—milling or dry processing, cereal manufacturing, wet milling or corn refining, manufacturing of Ethyl alcohol and beverages, and manufacturing of Butyl alcohol and acetone.



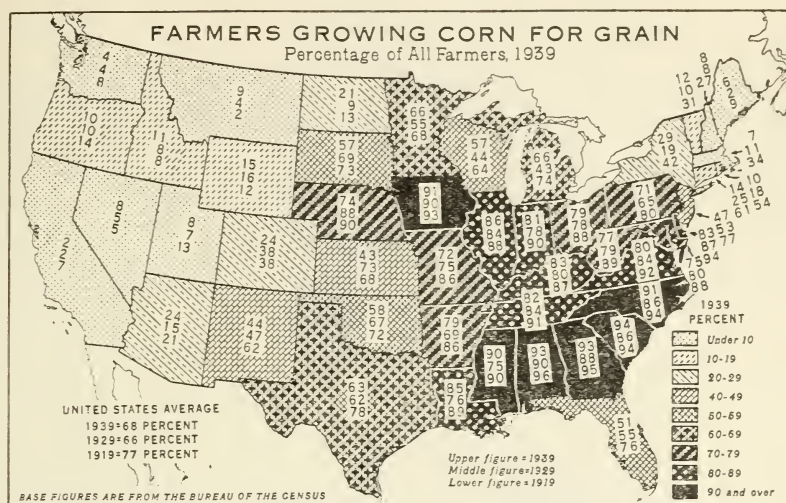
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FIGURE 22.—From 1929 to 1939 the increase in acreage of corn was uniformly heavy throughout most of the Cotton Belt, where corn has replaced cotton in a food-and-feed-diversification program. The increase in acreage of corn in the Dairy Belt was probably made in order to obtain corn in its various forms for feeding purposes.



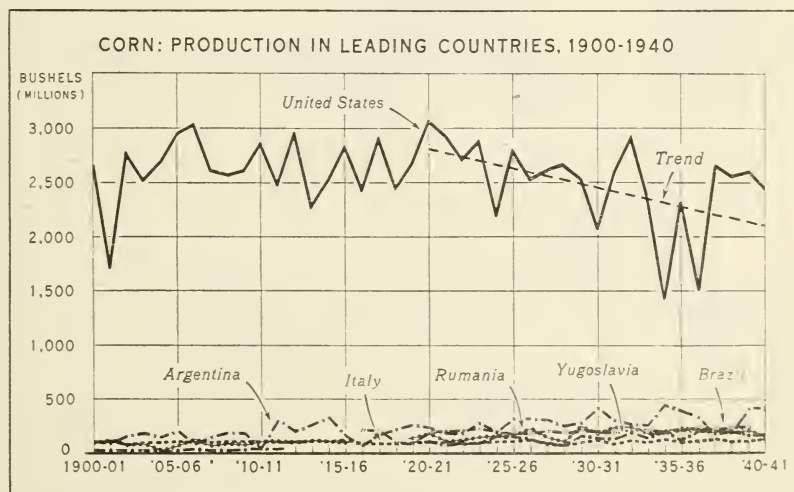
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FIGURE 23.—Between 1929 and 1939 a heavy decrease in acreage of corn occurred in the western Corn Belt and in the Great Plains. Some of this decrease was due to adjustments under the Agricultural Conservation program, and probably a greater proportion to the drought of 1939. Although the decrease in acreage was 11 percent, a slight increase in production occurred, due to the high average yield per acre of 29.4 bushels, which to some extent was the result of the rapidly increasing acreage of hybrid corn.



BA6E 4206

FIGURE 24.—In 1939 corn was grown by over two-thirds of all the farmers in the United States. Heavy decreases in the number of farmers growing corn occurred in the Great Plains States of South Dakota, Nebraska, Colorado, Kansas, and Oklahoma, from 1919 to 1939, due partly to shifts to more drought-resistant feed crops and replacement of grass on a considerable acreage of intertilled soils. The largest portion of all farmers growing corn occurs in the Cotton Belt, where production of corn per acre is light, but where more and more farmers are growing their own feed. Over 90 percent of all farmers in the eastern Cotton Belt States grew corn in 1939, whereas only 86 percent of the farmers grew corn in Illinois, in the heart of the Corn Belt.



BAE 31188

FIGURE 25.—The United States is the largest corn-producing country in the World. For the last 4 years shown on the chart the production of corn averaged about 2,560,000,000 bushels, or over 50 percent of the world total. From 1920 to 1940 the trend of corn production in the United States has been downward, whereas production in foreign countries has increased slightly. However, hybrid corn has had a tendency to maintain higher yields, whereas acreage has been lower.

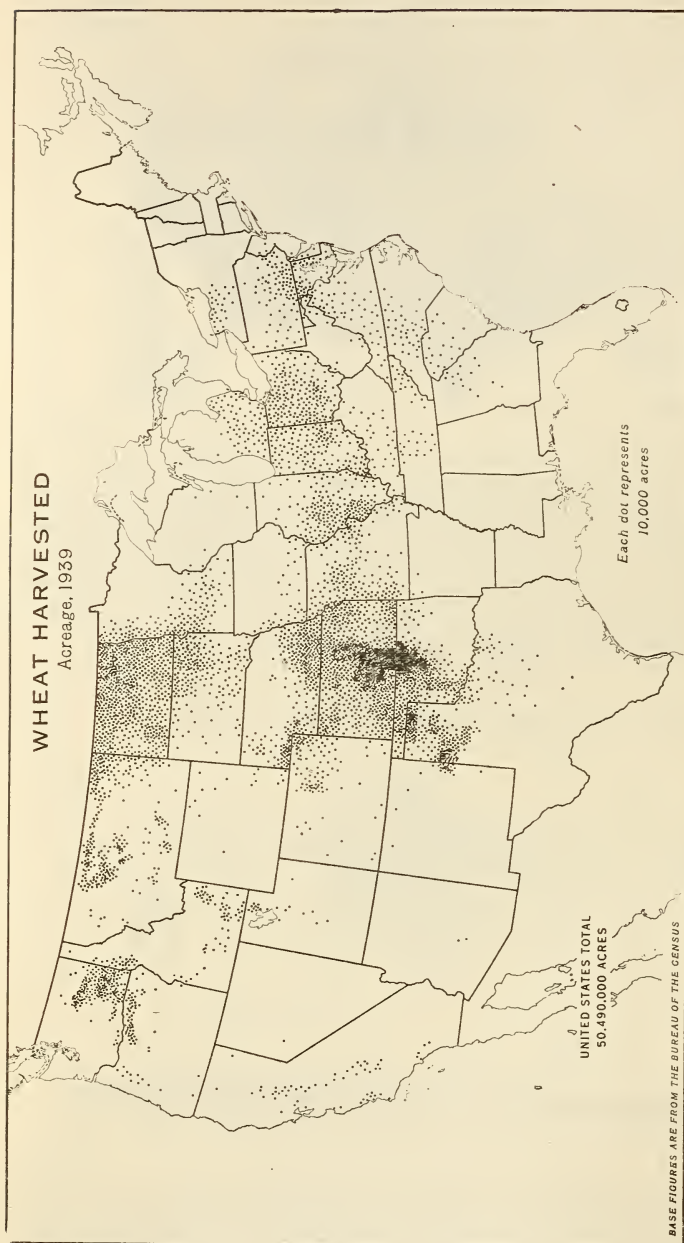
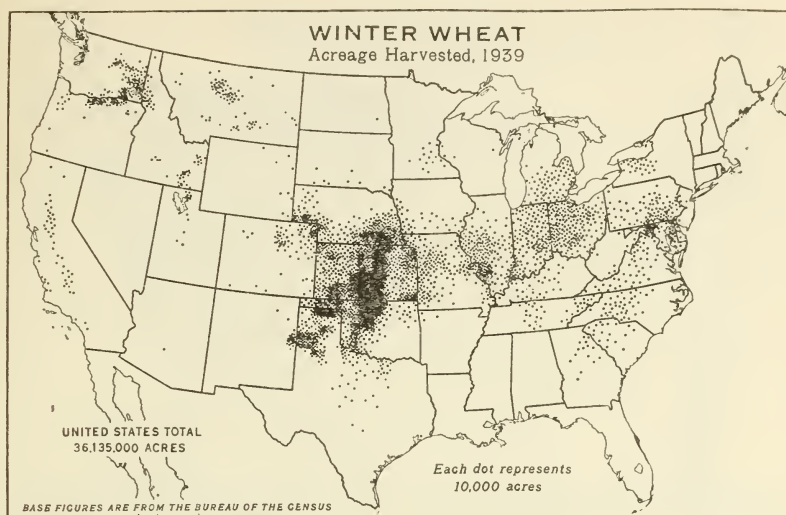


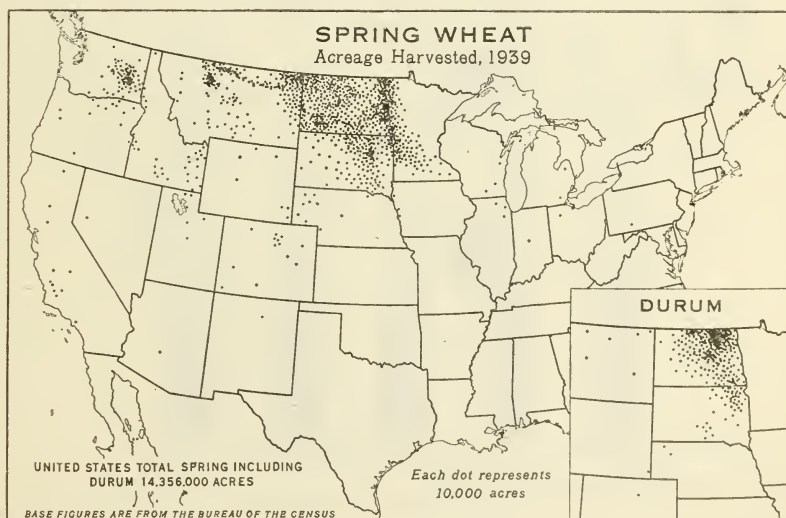
FIGURE 26.—In 1939 the United States had the second largest wheat acreage of any country in the world, about one-eighth of the World's total acreage. It was exceeded only by the acreage of the Union of Soviet Socialist Republics. Six classes of wheat, consisting of about 208 varieties, are grown in the United States. The different varieties vary in acreage from as little as 100 to more than 1,000,000 acres each. Relative importance of the six classes in terms of their percentage of total wheat acreage in 1939 are as follows: Hard red winter, 47.6 percent; hard red spring, 20.9; soft red winter, 19.6; white, 6.6; and Durum and red Durum wheats, 5.3 percent.

BAE 39730



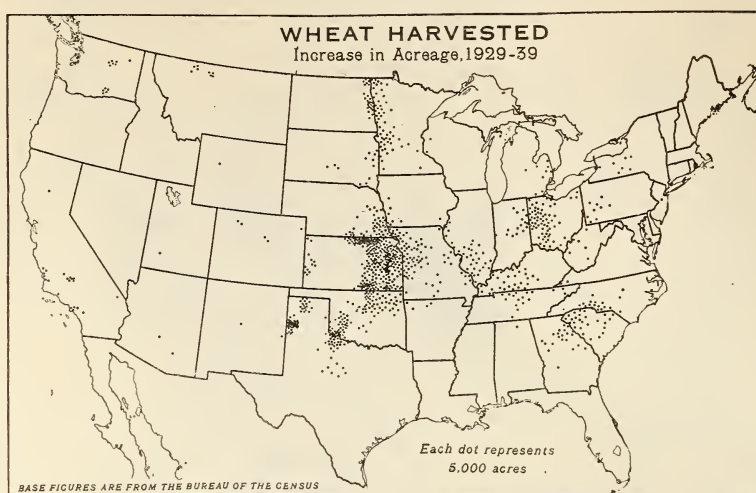
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FIGURE 27.—The winter-wheat acreage in 1939 was about 71.5 percent of the total acreage of wheat in the United States and consisted of hard red winter, soft red winter, and white classes. The hard red winter region lies principally in the South Central States, and the soft red winter region in the Eastern States. The white wheats are grown chiefly in the far Western States.



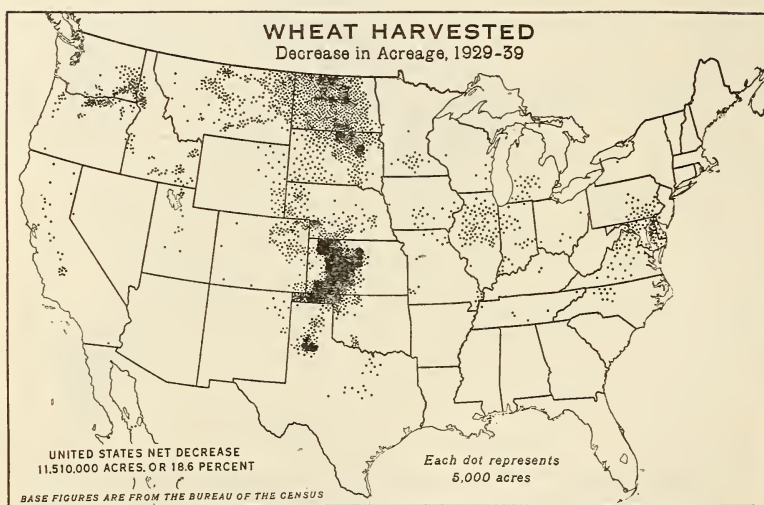
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FIGURE 28.—Acreage of spring wheat represents about 25 percent of the total wheat acreage. The two general spring-wheat areas are in the North Central States where the winters are severe (and where the fall-sown winter wheat does not generally survive) and in the subhumid areas of the Pacific Northwest States. The Durum wheats are grown almost wholly in the North Central States where in 1939 the estimated area was 3,372,000 acres.



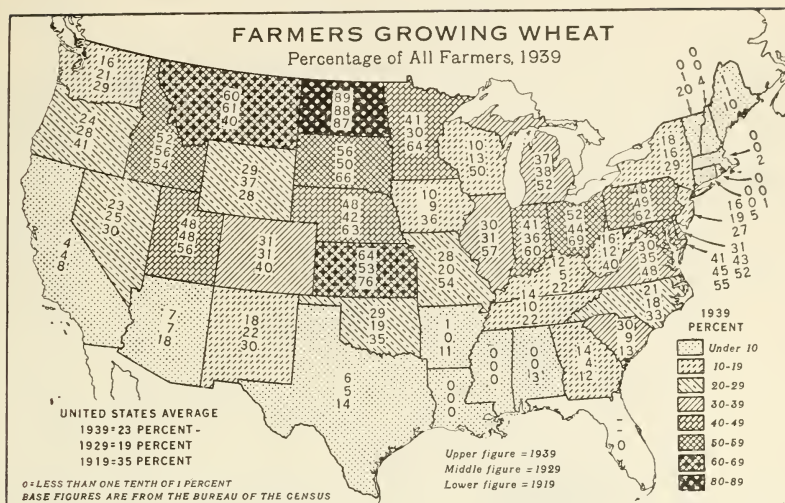
BAE 42017

FIGURE 29.—The increase in acreage of wheat between 1929 and 1939 occurred principally in the corn and winter-wheat States; in the Piedmont of the Carolinas and Georgia; in the Red River plains of North Dakota and Minnesota, and in the black-prairie area of eastern South Dakota and southwestern Minnesota. The increase in acreage in these limited areas was probably due to a desire for greater diversity of farming operations and to an effort toward self-sufficiency.



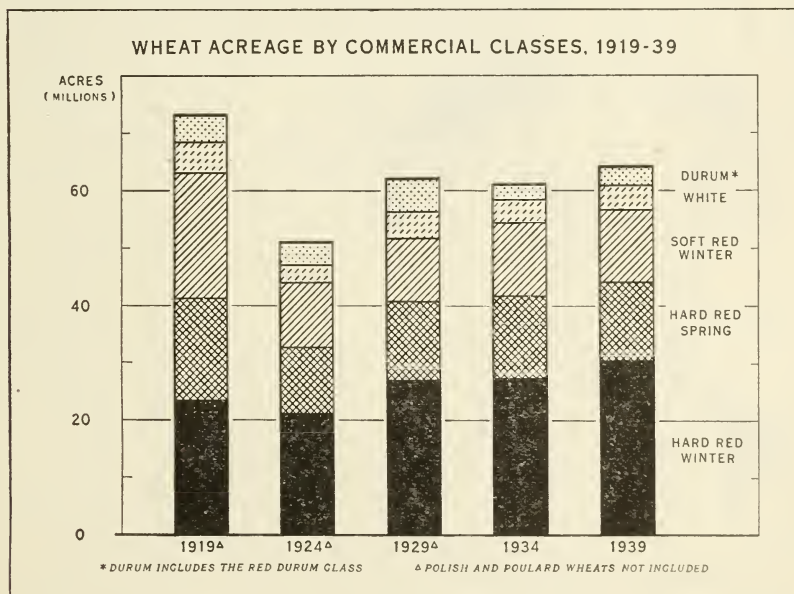
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FIGURE 30.—In 1939 the total acreage of wheat seeded was over 3 million acres less than that seeded in 1929, and the acreage abandoned was more than 10 million acres. The heavy reductions in acreage of wheat occurred in the heart of the hard winter and hard spring wheat regions. The net decrease of over 18 percent in the acreage of wheat harvested in 1939 under that harvested in 1929 was chiefly due to the Agricultural Adjustment program and the drought during the growing season of 1939.



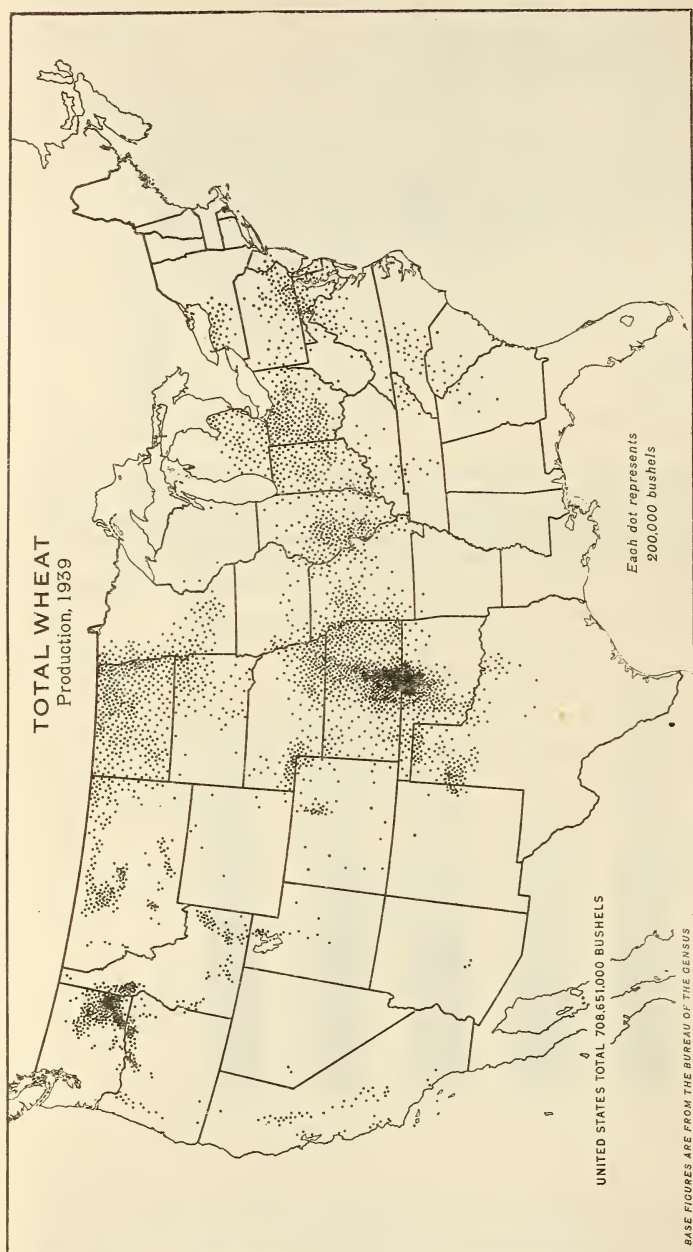
BAE 420 6

FIGURE 31.—The proportion of all farmers who grew wheat in 1939 was the same as in 1909. The largest percentage was in the spring wheat region. In the winter wheat belt the percentage is much lower and varies greatly on census dates. Increases and decreases in proportion of farmers growing wheat in the States outside the Great Plains area were about even.



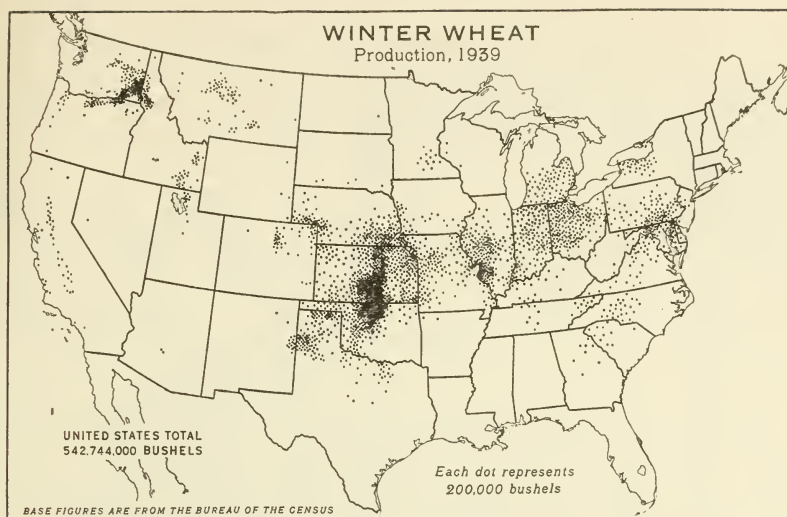
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FIGURE 32.—The hard red winter wheats are the most important commercial class of wheat and in 1939 constituted nearly one-half the acreage of all commercial wheat. They have a high protein content and along with hard red spring wheats are used to make most of the bread flour. Soft red winter wheat is best adapted for use in making pastry flour. White wheats are mainly used for pastry purposes, but some of them go into shredded wheat and bread. Durum wheats are used mostly for making macaroni, but the red Durum is used chiefly for feed.



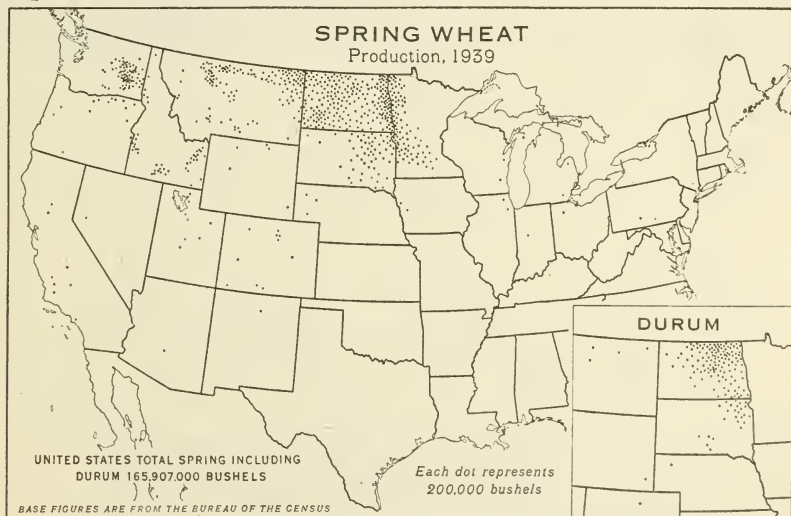
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FIGURE 33.—The United States produces nearly one-fifth of the world's wheat, excluding the wheat grown in the Union of Soviet Socialist Republics and in China. In 1939, Kansas was the leading wheat-producing State, with a production of 112,414,000 bushels; North Dakota was second with 69,261,000 bushels; and Oklahoma was third with 58,493,000 bushels. In 1939, total production in the United States was about the same as the average for the previous 10 years. Production increased to 812,374,000 bushels in 1940 and to 945,937,000 bushels in 1941. The 1941 production was close to the all-time high of 1,009,000,000 bushels in 1915. Stocks of wheat on hand in the United States on July 1, 1917, totaled less than 100 million bushels, whereas stocks on hand July 1, 1942 were more than 600 million bushels.



BAE 39911

FIGURE 34.—The hard red winter wheat area is almost double the size of the other two winter wheat areas combined. This is the largest and probably the most important commercial class of wheat in the United States, and is grown principally in the central and southern Great Plains areas. The varieties of soft red winter wheat are grown chiefly in the eastern half of the country and to some extent in the Pacific Northwest. The white (very soft) wheat is grown in the far Western States and in New York, Michigan, and Ohio.



BAE 39911

FIGURE 35.—Production of spring wheat, including Durum wheat, in 1939 represented slightly more than 25 percent of the wheat crop in the United States. Spring wheat is produced principally in the Northern Plains and prairie States. Hard red spring wheat is used almost exclusively for bread, and is considered a superior wheat for this purpose. The Durum wheat is used chiefly to make macaroni. North Dakota leads in the production of spring wheat, with 69,142,000 bushels; out of this total, 24,720,000 bushels are Durum wheat.

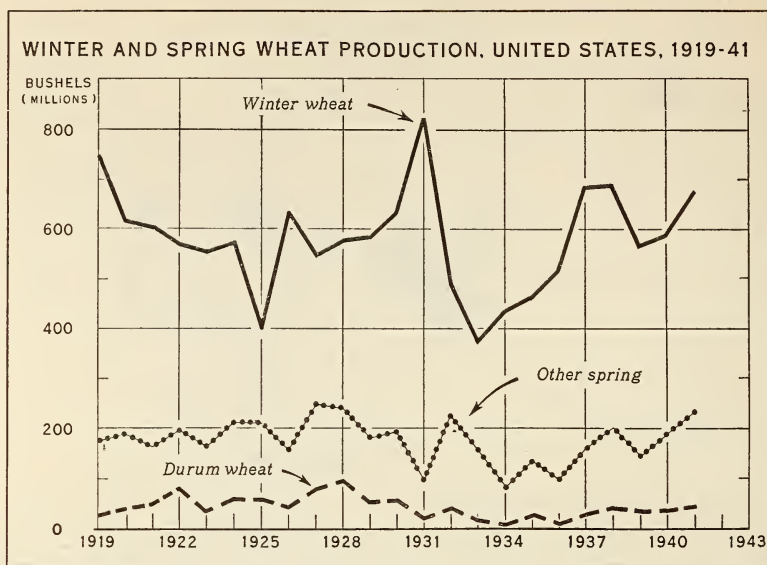


FIGURE 36.—The production of winter wheat has fluctuated from about 400,000,000 bushels to 800,000,000 bushels between 1919 and 1941. The largest acreage harvested was in 1919, and the heaviest yield per acre occurred in 1931. Both Durum wheat and other spring wheat were on a lower level of production from 1931 to 1941 than during the period 1919 to 1930. Since 1934, the year of the severe drought, Durum wheat and other spring-wheat production has steadily increased, and in 1941 the production was the highest in more than 10 years.

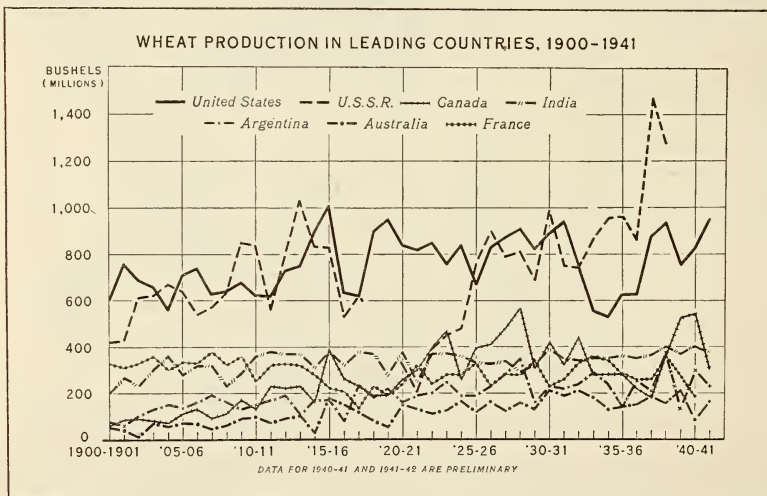


FIGURE 37.—Since 1933, the United States has been the second largest wheat-producing country in the world. The Union of Soviet Socialist Republics produced the largest crop. Canada, Argentina, and Australia have been important producers since 1900. The production of wheat in India has remained stable, and there has been an actual decrease in France.

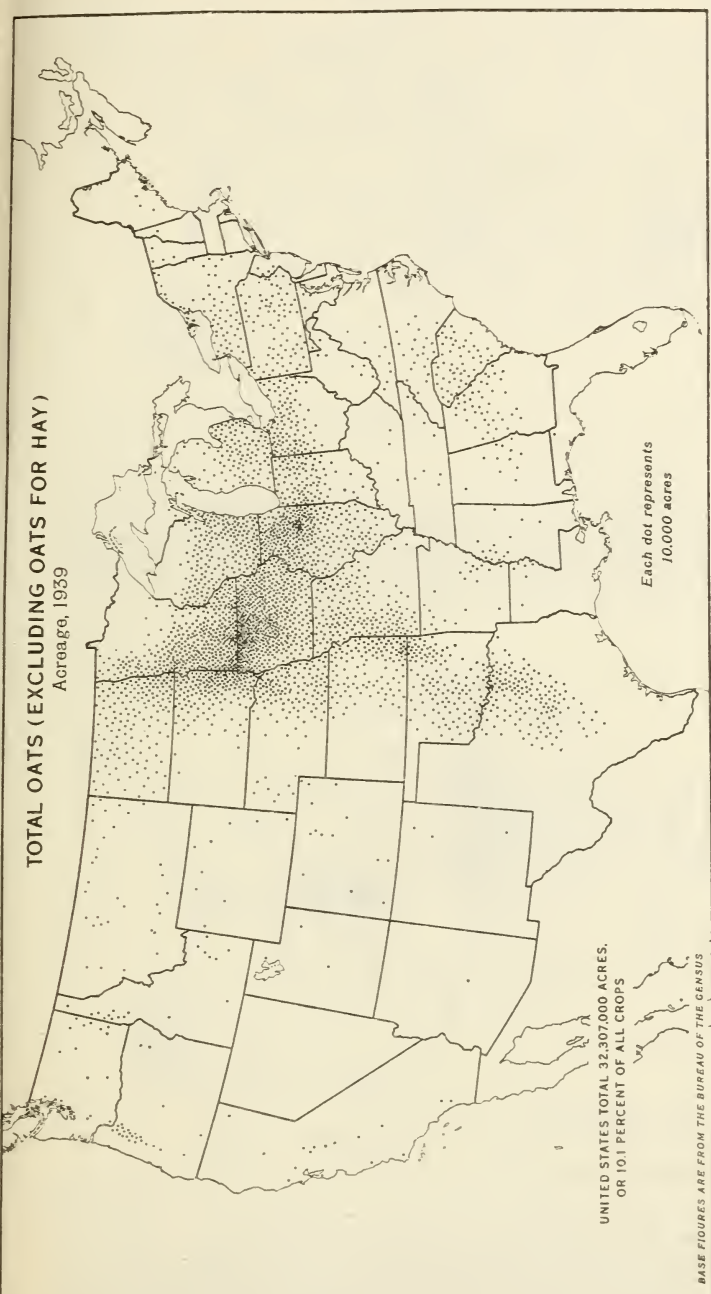
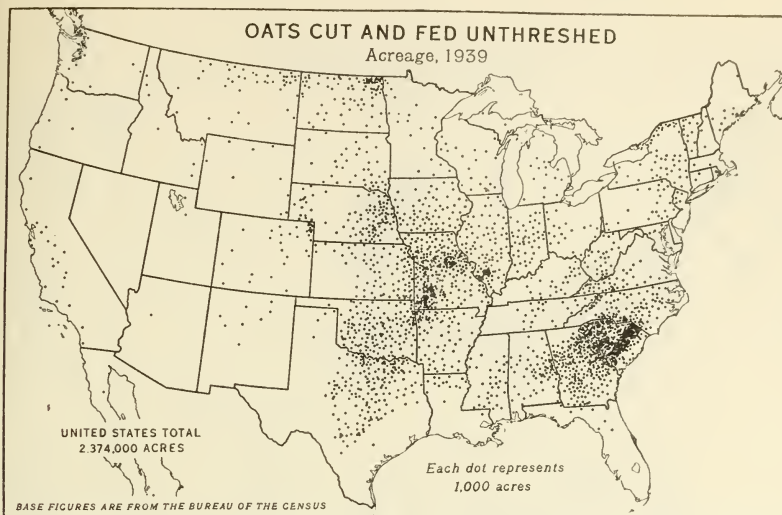
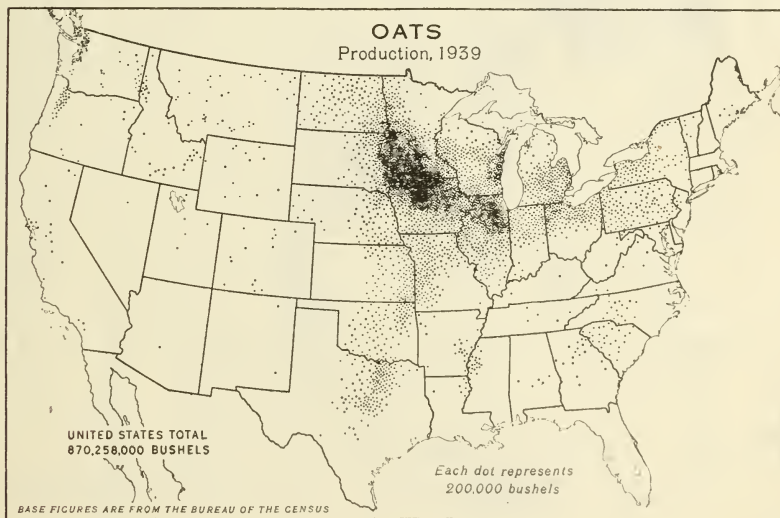


FIGURE 38.—The valuable bone and muscle-building ingredient's contained in oats make them the principal small-grain feed for horses and mules, young livestock, and breeding stock. The principal oat-producing areas in the United States are in the Corn and Spring Wheat Belts where the climate is cool and moist. An area also extends into the Southern Plains and some scattered acreage is found in the South, most of which is made up of fall-sown oats. Acreage of oats in the United States is exceeded only by that of corn and wheat; in 1939 it was about 23 percent of the world's total. Iowa with 5,001,000 acres, Minnesota with 3,717,000 acres, and Illinois with 3,079,000 acres are the three leading States in acreage of oats.



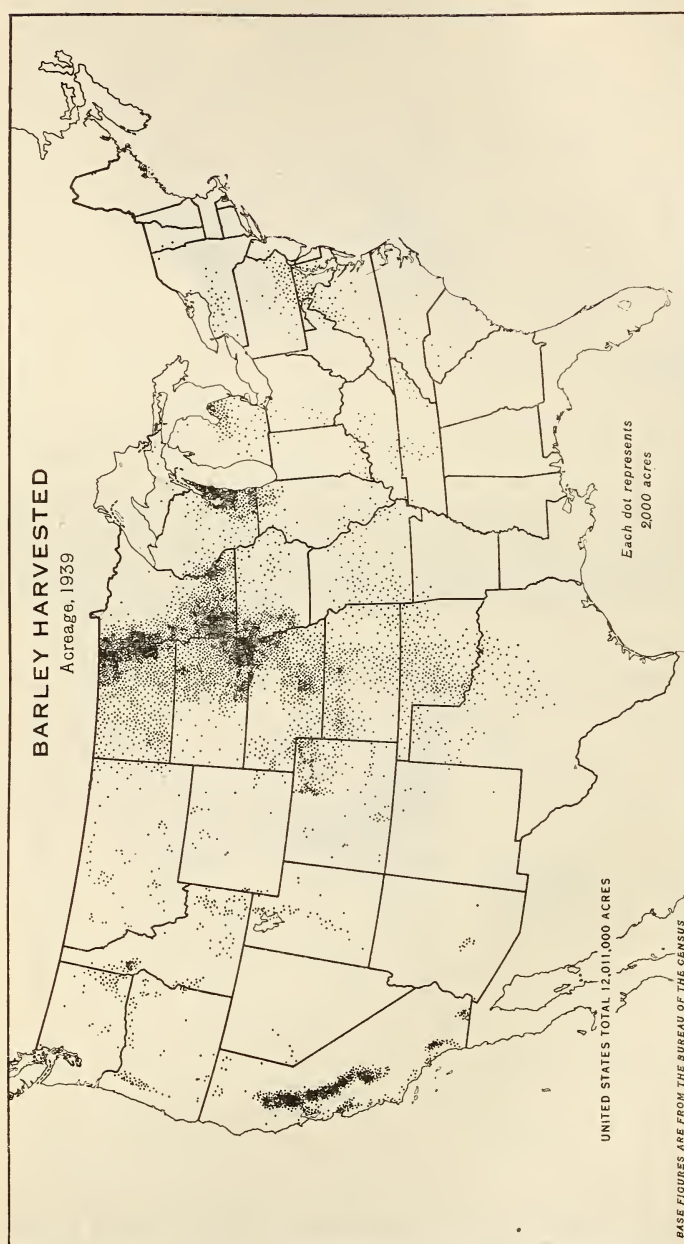
BAE 39944

FIGURE 41.—The acreage of oats cut and fed unthreshed in 1939 was about 7.3 percent of the total acreage of oats (excluding oats for hay). Oats are cut and used unthreshed usually where acreages are too small for threshing and where farmers retain some for feed. In areas where poor oat crops occur and prices are low a greater proportion is generally cut and fed unthreshed. The three leading States in which this practice is common are South Carolina, with 288,000 acres; Missouri, 275,000 acres; and Georgia, 242,000 acres.



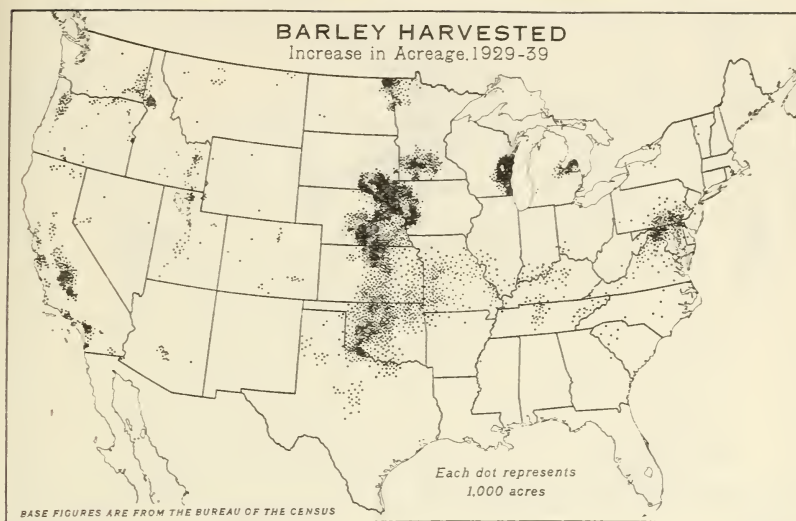
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FIGURE 42.—The production of oats declines when the weather is excessively dry or moist. In 1939 the crop season was rather dry and acreage planted was lower than usual, resulting in a total yield smaller than the previous 10-year average. Since 1929, new oat-producing areas have developed, principally in the Yazoo-Mississippi and lower Arkansas River areas, in contrast to the general decline in production of oats throughout the United States. Soybeans and barley have replaced oats to some extent throughout the Corn Belt.



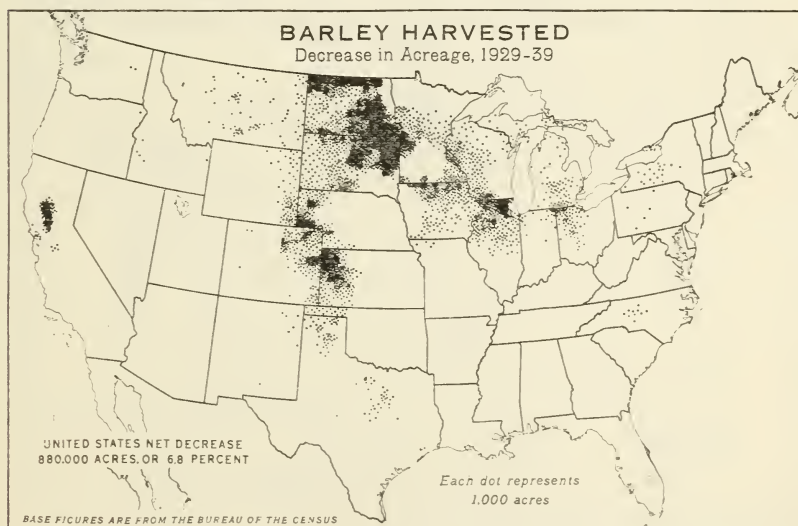
BAE 39750

FIGURE 43.—Barley is a minor crop in the United States, compared with corn, wheat, and oats. Varieties yielding the highest grade of grain are in demand for barley production for the brewing industry. Great quantities of barley are used as feed by the dairy industry. Most of the barley grown in the United States is fed on the farm on which it is grown. Barley grows well where the ripening season is long and cool. Conditions are favorable for growing barley in the Northern and Western States. The heaviest acreages occur in the northern part of the Mississippi Valley, in the valleys of California and southeastern Minnesota, and in southern Wisconsin. Barley competes little with corn, as it is usually grown where corn is not a dominant crop.



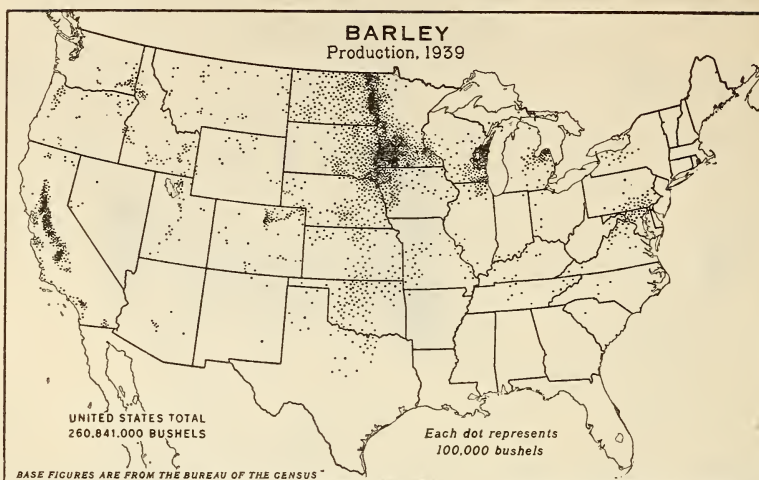
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FIGURE 44.—Increases in acreage of barley occurred principally in the Great Plains, Pennsylvania, the valley and Piedmont sections of Maryland and Virginia, the lake-shore areas of Wisconsin and Michigan, the valleys of the West, and the South. The general increases shown on the map were contributed to by various causes: (1) Introduction of a high-yielding barbless variety in various areas, (2) shifting from wheat to barley in the Great Plains area, and (3) the use of winter barley cover for pasture and erosion control in the South.



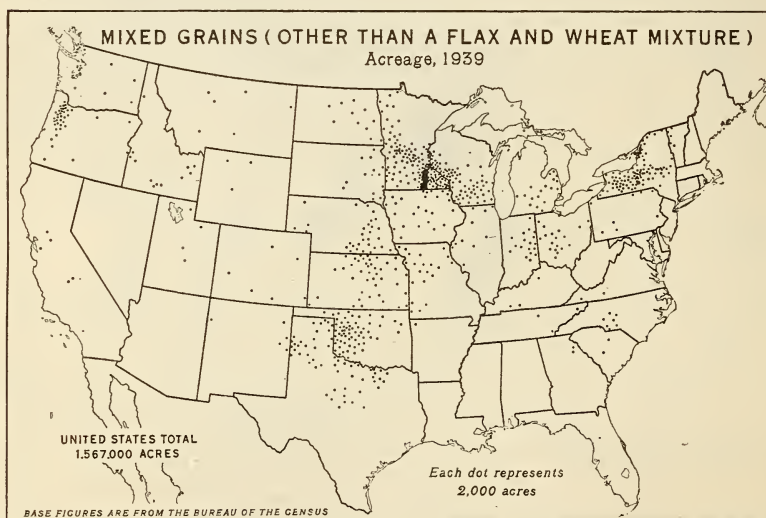
BAE 39942

FIGURE 45.—The decrease in acreage of barley from 1929 to 1939 occurred mainly in the spring wheat and hard winter wheat belts, and in the northern valleys of California. The acreage harvested in 1939 in California, North Dakota, South Dakota, Nebraska, Kansas, and Colorado was less than 80 percent of the actual acreage seeded. Much of the abandoned acreage was due to unfavorable weather in these States.



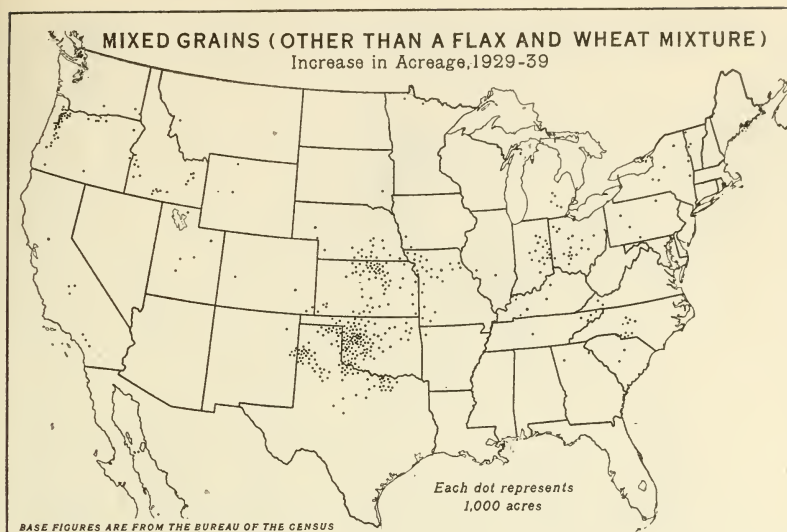
BAE 39853

FIGURE 46.—Barley is produced in many countries throughout the temperate zone. The United States produces about 10 percent of the world's barley, and is the third largest producer, exceeded only by China and Russia. More than half of the crop is grown in the North Central States. Minnesota is the leading producing State, with 54,946,000 bushels, and California ranks second with 32,550,000 bushels.



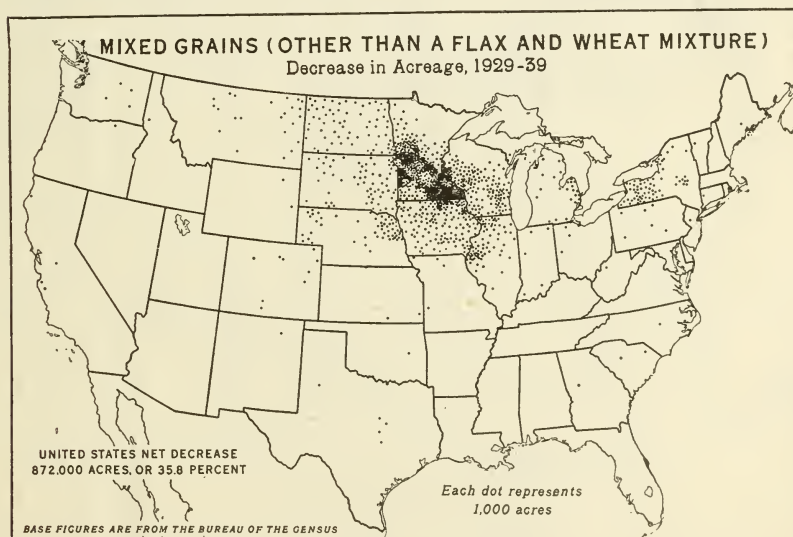
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FIGURE 47.—Two or more of these grains (oats, barley, rye, and buckwheat) are often sown in combination for feeding purposes, especially in the dairy- and livestock-producing areas. Wheat and flax can also be sown in combination, but in 1939 they were not included in the tabulations of mixed grains harvested together, and the total acreage was only 65 percent of the 1929 acreage of mixed grains.



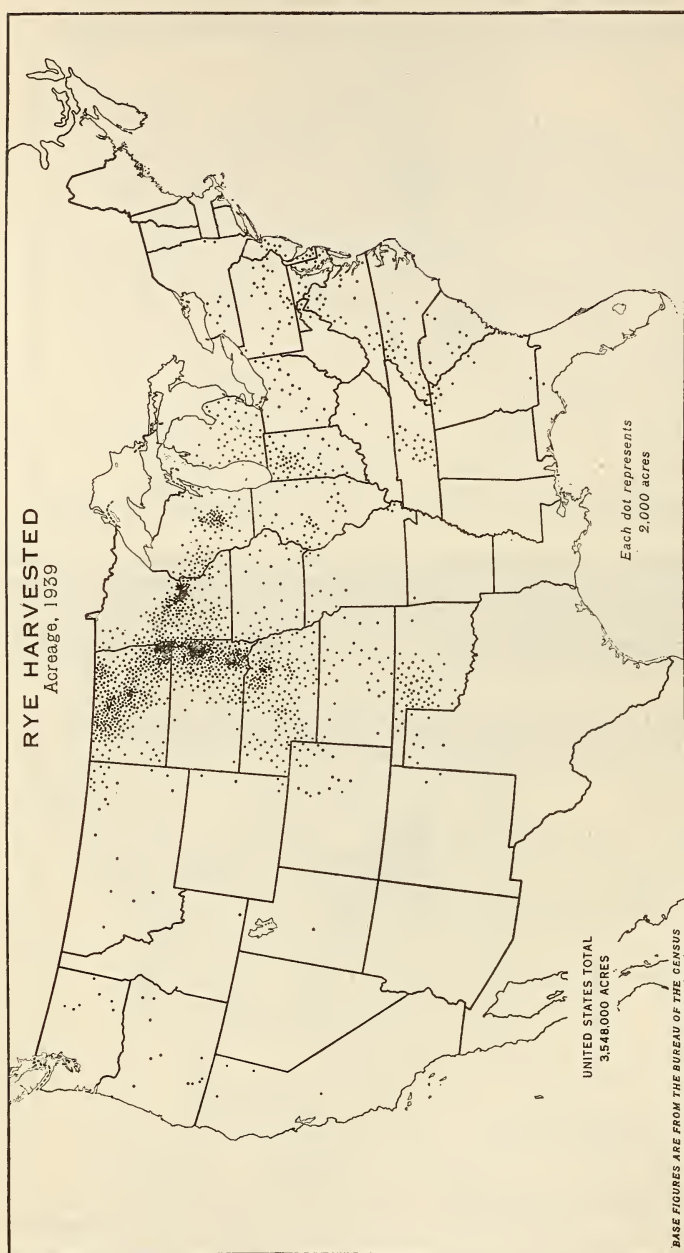
BAE 42025

FIGURE 48.—Increases in the acreage of mixed grains in 1939 occurred in those areas in which increases in the separate grains were most noticeable. Acreage of rye, barley, and oats, as well as the acreage of these grains sown in combination for feeding purposes all increased in the South Central States. Some increases occurred in the eastern Corn Belt, the Southern Appalachian region, and the fertile valleys of the West.



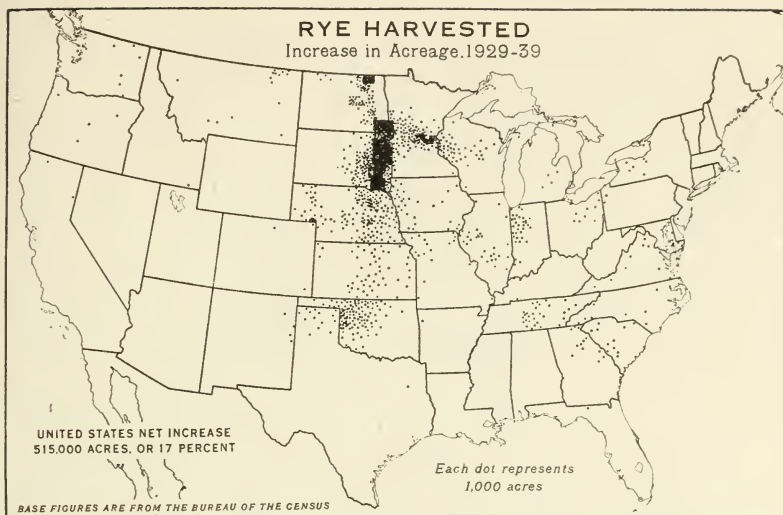
BAE 42026

FIGURE 49.—The net decrease in mixed grains between 1929 and 1939 was about 35.8 percent. This decrease occurred throughout the spring wheat and dairy States and was probably due to the general decrease in buckwheat in New York State and to the fact that wheat was not included with the mixed grains in 1939. About 63 percent of the total United States decrease occurred in Minnesota alone, which greatly reduced its significance as the leading State harvesting mixed grains.



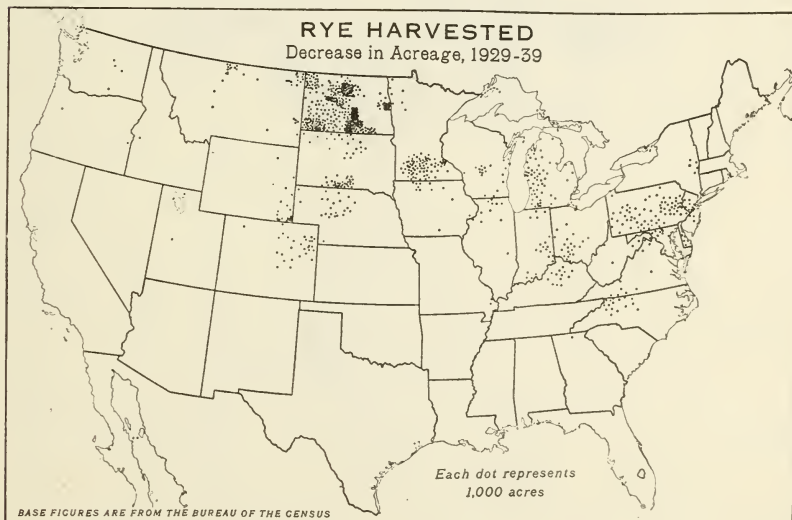
BAE 39915

FIGURE 50.—The principal acreage of rye for harvest is located in the sandy and fine sandy loam soils of the subhumid areas of the northern Great Plains. In 1939, the three leading States in acreage of rye were North Dakota, with 779,000 acres; South Dakota, 616,000 acres; and Minnesota, 430,000 acres. Rye can be grown where winters are too severe even for winter wheat. It is used as a green manure, winter cover, and pasture crop, and because it grows so well on sandy and other relatively infertile soils, it is used extensively as a "catch crop." About 60 percent of the harvested rye crop is used for feed and seed; a little more than half of the remaining 40 percent is used for flour; and the remainder is utilized in the distilling industry.



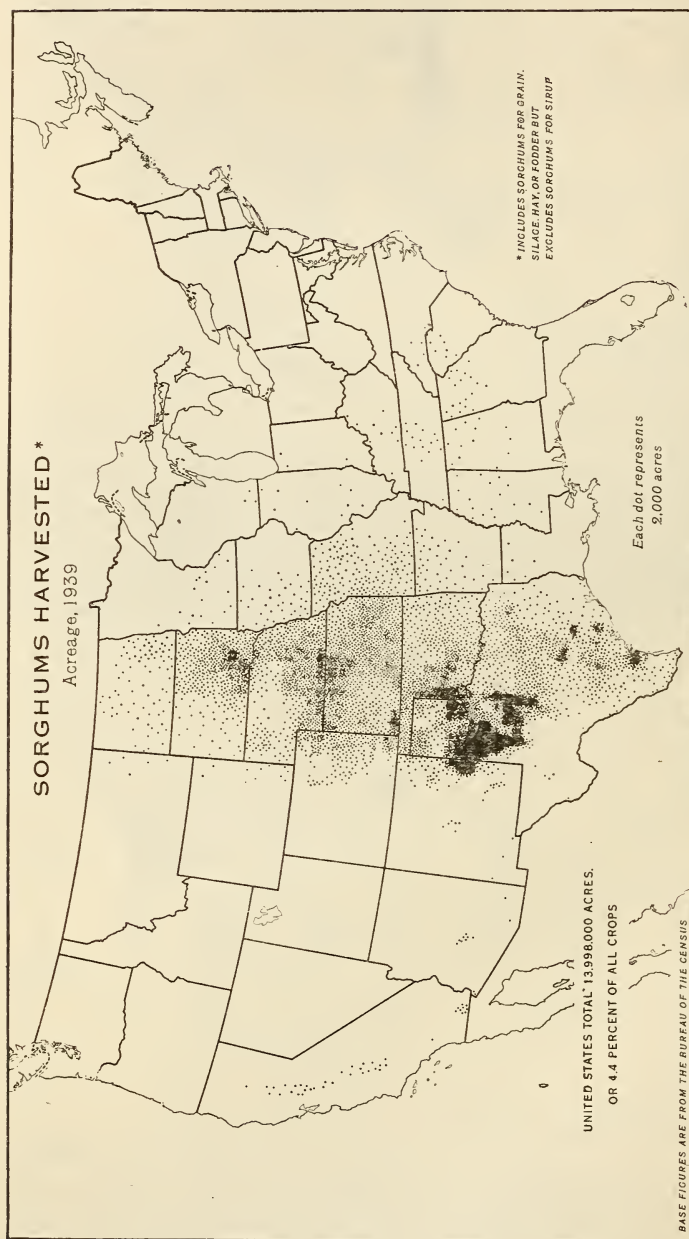
BAE 42015

FIGURE 51.—The net increase in the acreage of harvested rye in the United States from 1929 to 1939 was about 17 percent. Heavy increases occurred in the North Central States, especially in the eastern part of South Dakota, southwestern North Dakota, central Minnesota, eastern Nebraska, and eastern Kansas. Heavy increases also occurred in western Oklahoma, and general increases occurred in most of the Eastern States. Rye has replaced corn in many areas. It is used more as a winter cover and pasture crop, but when the crop is heavy it is frequently harvested. Some rye is also grown with wheat for feed.



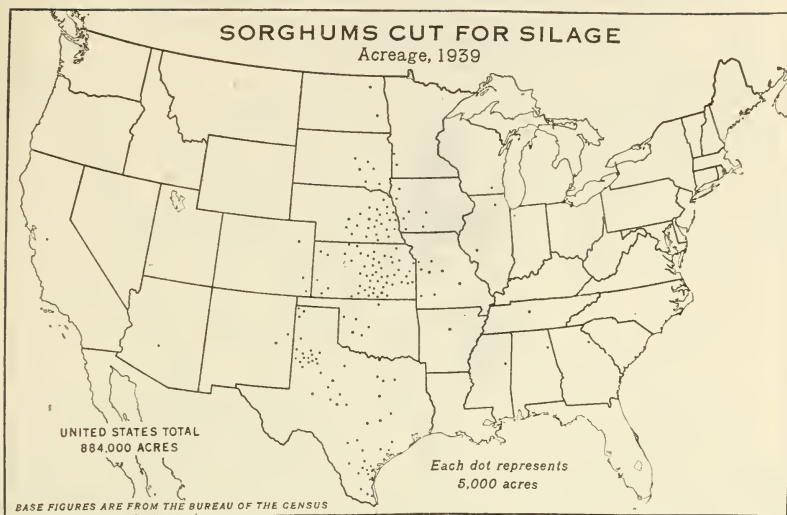
BAE 42016

FIGURE 52.—The heaviest decrease in the acreage of rye between 1929 and 1939 occurred in western North Dakota where heavy acreages of rye are now used as cover crops and for temporary pasture. Relatively heavy decreases also occurred in southern Minnesota, eastern Michigan, and Pennsylvania, but moderate decreases occurred in many other districts in which farmers have been reducing acreage of rye for use of other crops.



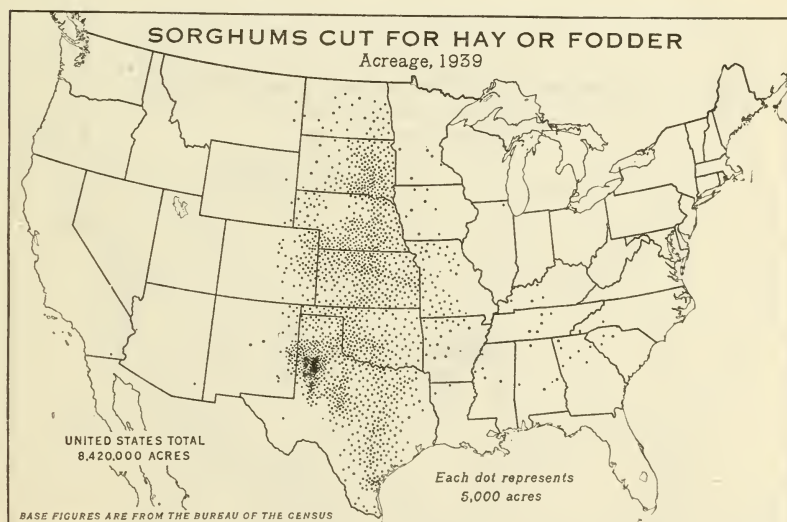
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FIGURE 53.—More than 80 varieties of sorghums and sorgo are now grown commercially in the United States for grain or forage. These varieties differ greatly as to growing season, and ability to resist drought. Sorghums grown for forage may be utilized as fodder, stover, silage, or hay; they may be cut and fed green; or used for pasture. These crops are to the Great Plains region what corn is to the Corn Belt, and are generally recognized as the basis of a permanent diversified agriculture. In the northern Great Plains area, the seasons are shorter and cooler and the crop is grown mostly for forage, as grain production is too uncertain. Sorghums are used in the semiarid farming districts as a substitute for corn, because of their high yield and drought-resistant qualities.



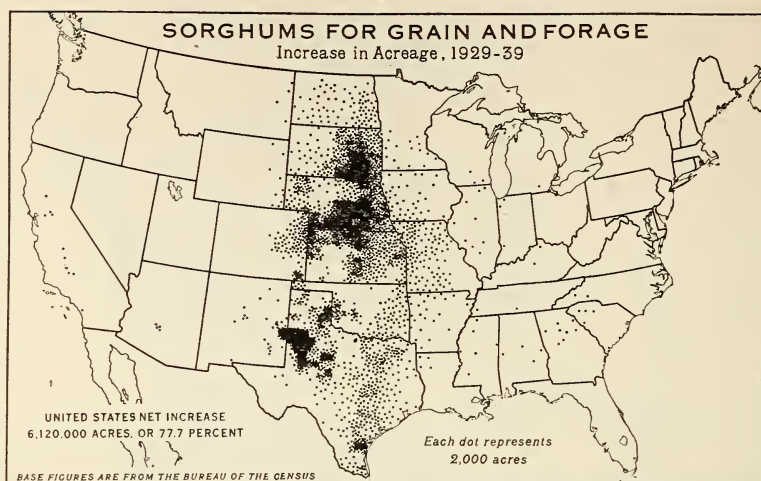
BAE 42011

FIGURE 54.—Only 63 percent of the acreage of sorghums for all purposes, except sirup, was cut for silage in 1939, but such usage is expanding rapidly. Sorghum cut for silage has a feeding value practically equal to that of corn silage. Grain-sorghum silage is often to most economical way to utilize the sorghum crop. It is especially valuable as feed in winter for cattle and sheep.



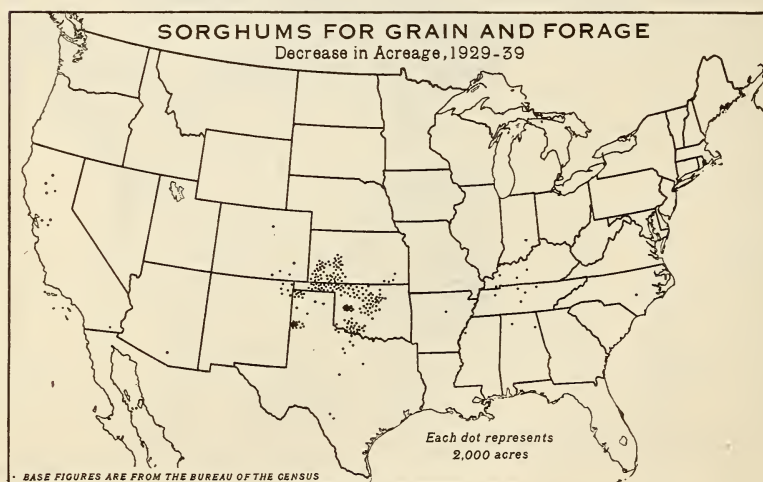
BAE 42010

FIGURE 55.—In 1939 the Census reported sorghums cut for hay and fodder in practically the entire area in which sorghums are grown, except the Sacramento and San Joaquin Valleys of California, where they are grown chiefly for grain. Grain sorghums may be utilized as forage in the form of stover and fodder, or they may be made into silage. For these purposes they compare favorably with corn. In the feeding of grain-sorghum fodder in bundles, the grain may range from practically none to nearly a third of the dry weight.



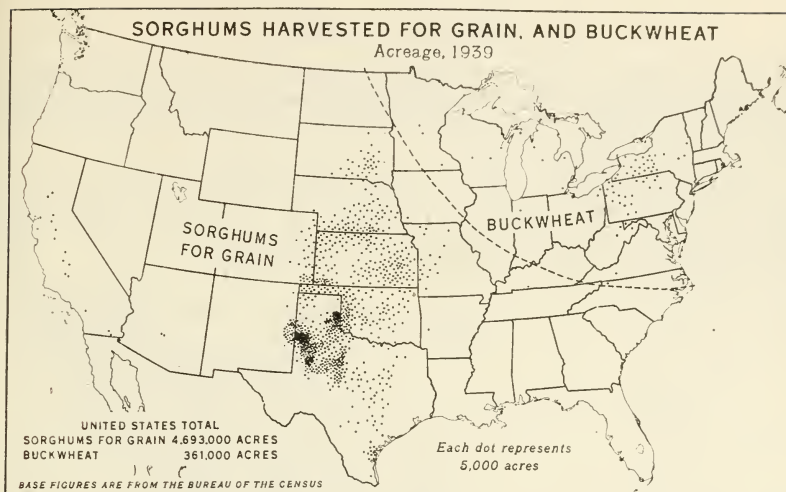
BAE 42185

FIGURE 56.—The net increase of about 78 percent in the acreage of sorghums between 1929 and 1939 was largely attributed to heavy plantings in the Great Plains area to replace other feed and forage crops unable to resist the droughts of that period. Large acreages of sorghums were planted in fields shifted from wheat under the adjustment program, and large acreages once used for corn are now planted to sorghums.



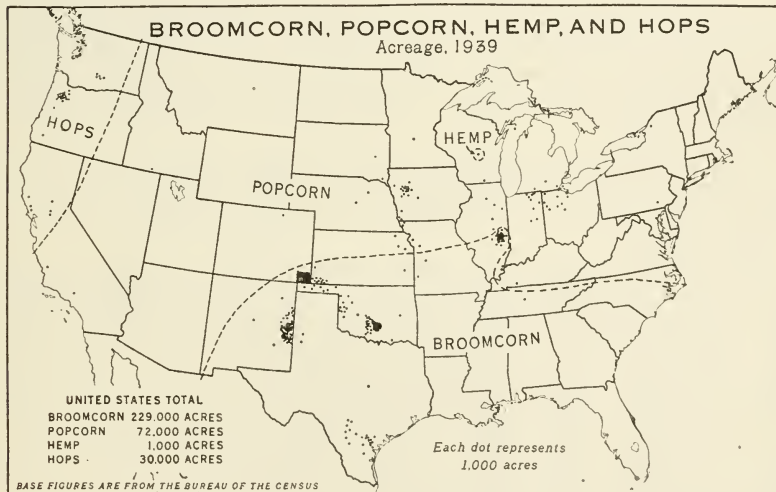
BAE 42186

FIGURE 57.—The decrease in the acreage of sorghums between 1929 and 1939 occurred almost entirely in southwest Kansas, southern Colorado, western Oklahoma, and the Texas Panhandle. This relatively small area of decreased acreage of sorghums was surrounded by heavy increases in sorghums, and the decrease was probably due to local unfavorable growing conditions.



BAE 42009

FIGURE 58.—The acreage of sorghums harvested for grain in 1939 was mainly in the Great Plains States, with some acreage in Missouri, the irrigated areas of the Southwest, and the Sacramento and San Joaquin Valleys of California. These constituted about 33.5 percent of the total acreage of sorghums. Grain sorghums are used to feed all classes of livestock, although it is desirable to grind the grain if it is fed to livestock other than sheep, and poultry. Acreage of buckwheat in 1939 was only about 58 percent of the 1929 acreage and is now mostly confined to Pennsylvania and western New York.



BAE 39916

FIGURE 59.—Several special crops, important in local areas, but rather unimportant nationally, have been combined in this map. In 1939 broomcorn (botanically one of the sorghum group) had decreased about 27 percent, popcorn had almost doubled its acreage, hemp remained about the same, and hops had increased about 30 percent, as compared with the 1929 acreages. Decreases in acreage of broomcorn and increases in acreage of hops were general in their old established areas, whereas the chief increases in popcorn occurred in new areas extending across northern Illinois, Indiana, and Ohio.

THE HAY CROPS

Hay occupies a position of great importance in the agriculture of the United States. The average annual value of hay production in the 10 years 1930-39 was about 667 million dollars—more than that of any other crop except corn.

The most important form of harvested forage is hay because it does not deteriorate rapidly in storage, is fed to all forage-eating animals, can be handled commercially, and can be produced without great expense for labor, machinery, and buildings.

TABLE 1.—*Hay: acreage harvested and yield per acre, United States, 1909, 1919, 1929, and 1939*

Kind of hay	Acreage harvested				Yield per acre			
	1939	1929	1919	1909	1939	1929	1919	1909
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
Alfalfa.....	12,803	11,516	8,625	4,707	2.00	2.04	2.19	2.52
Timothy and clover mixed.....			19,349	19,542		1.23	1.31	1.27
Red, alsike and mammoth.....	17,284	25,547	10,941	14,686	1.2		1.17	1.22
Sweetclover and lespedeza.....		4,203	3,161	2,443	1.1	1.14	1.31	1.29
Annual legumes saved for hay.....	5,844	1,410	1,847		1.2	.96	.93	
Small grains cut for hay.....	7,187	3,068	5,675	4,325	1.1	1.07	.96	1.24
Other tame or cultivated grasses.....	3,690	3,205	5,337		1.1	.96	1.06	1.07
Wild, salt, or prairie grasses.....	7,220	5,363	6,056		.8	.81	.91	1.07
Wild, salt, or prairie grasses.....	11,961	13,517	17,126	17,187				
Total.....	65,979	67,828	72,780	68,227	1.21	1.26	1.24	1.28

In 1939, 82,413,000 tons of hay were harvested from 65,979,000 acres, or 20.5 percent of the total acreage of all harvested crops. In 1929, 85,281,000 tons were harvested from 67,828,000 acres, or 18.7 percent of all cropland harvested. The largest hay production occurred in 1919 when a crop of 90,356,000 tons was harvested from 72,780,000 acres.

Native, or wild hay, sometimes called "prairie hay" or salt hay in the United States, was large in acreage in 1939, amounting to about 12 million acres. Even so it constituted less than one-eighth of the total acreage of hay.

Hay is a necessary crop in good rotation, and in the hay and dairy belt, where most of the hay is produced, 2 years of clover and grass fit in well with corn, oats, and wheat on a 5-year crop-rotation program. The cultivated crop, corn, controls weeds and uses manure effectively; it provides both grain and stover for feed, or the entire crop may be used for silage. Wheat is a good nurse crop for the clover and grass.

The quality or feed value of hay varies more than any other harvested feed crop. Under almost identical conditions in the same area, there is a wide difference in quality of hay, due chiefly to lack of understanding as to good haymaking practices and also to a tendency for farmers to give less attention to the hay crop than to other crops.

The great number of different plants that may be utilized for hay makes possible the production of hay wherever it is possible to produce crops at all.

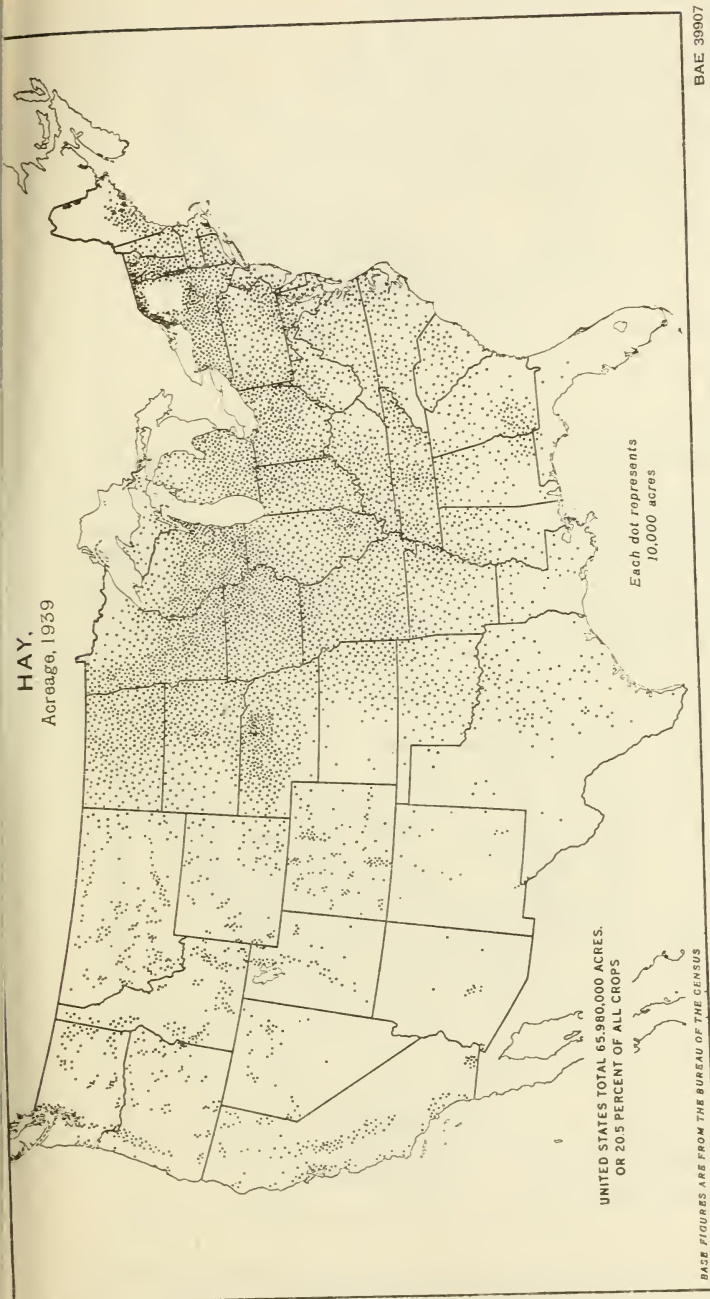
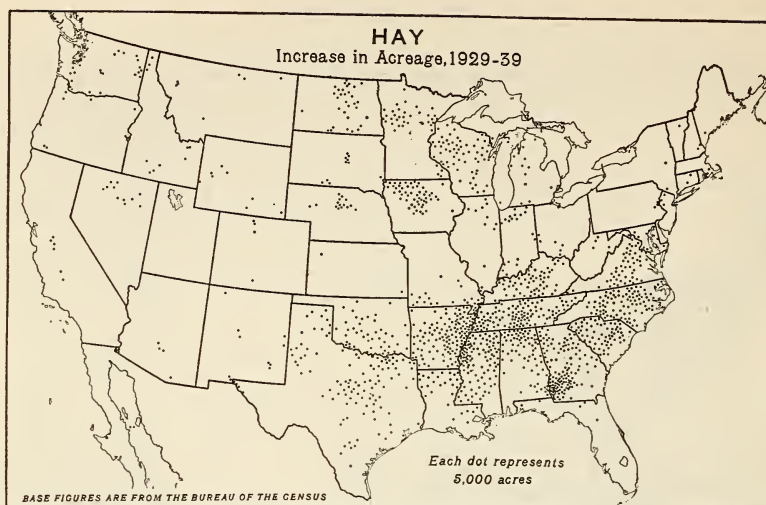
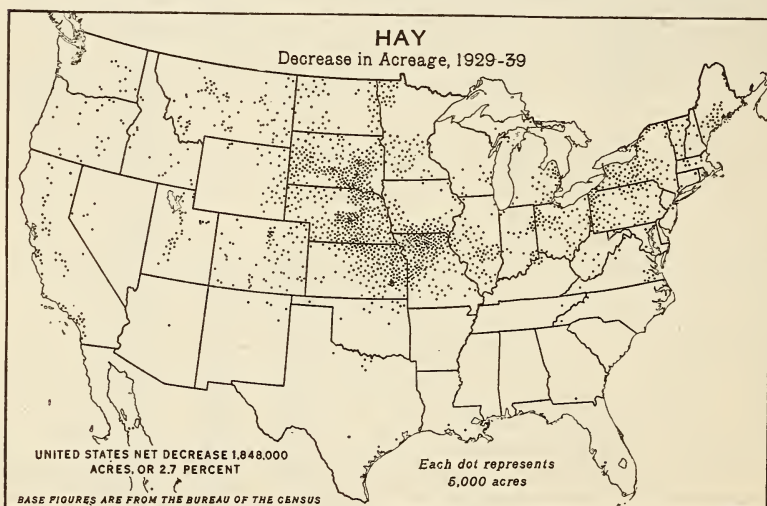


FIGURE 60.—The acreage of hay in 1939 extended throughout the United States and was more evenly distributed than ever before. This was probably due to the increase in 12 Southern States of 4,256,000 acres or about 75 percent above 1929, whereas the remaining States had a decrease of 6,105,000 acres, or about 10 percent. The total acreage of hay for 1939 was composed of clover or timothy hay, alone or mixed, 26.2 percent; sweetclover, 1.7 percent; alfalfa, 19.4 percent; wild hay, 18.1 percent; all other tame hay, 11.0 percent; lespedeza hay, 7.1 percent; annual legumes saved for hay, 10.9 percent; and small-grain hay, 5.6 percent. Acreage devoted to hay sometimes can be diverted to other crops, but the addition of grass hay in cropping systems is not likely where it might compete with cash crops. In 1939 the three leading States in acreage of hay were Minnesota, 4,288,000 acres; Wisconsin, 3,395,000 acres; and New York, 3,001,000 acres.



BAE 42100

FIGURE 61.—The increase in all hay acreage in 1939, compared with 1929, occurred mostly in the Southern States, where heavy increases in lespedeza, various annual legumes saved for hay, and all other tame hay amounted to 4,256,000 acres in 1939, or about 75 percent more than the 1929 acreage. This is the greatest increase occurring in any 10-year census period. The rest of the increases occurred in alfalfa in the eastern Corn Belt and the Lake States, and in other tame hay in New England and the northern Great Plains.



BAE 42101

FIGURE 62.—Practically all the decrease in total hay in 1939, compared with 1929, occurred north of 37° latitude, except for a few small areas in the South, and in southern California. A drought during 1939 in the Great Plains contributed toward the net decrease of nearly 2,000,000 acres. This was chiefly accounted for by the heavy decreases in acreage of alfalfa in the Northern Great Plains and in the West, and by a decrease in timothy, and timothy and clover mixed, in the eastern half of the northern area.

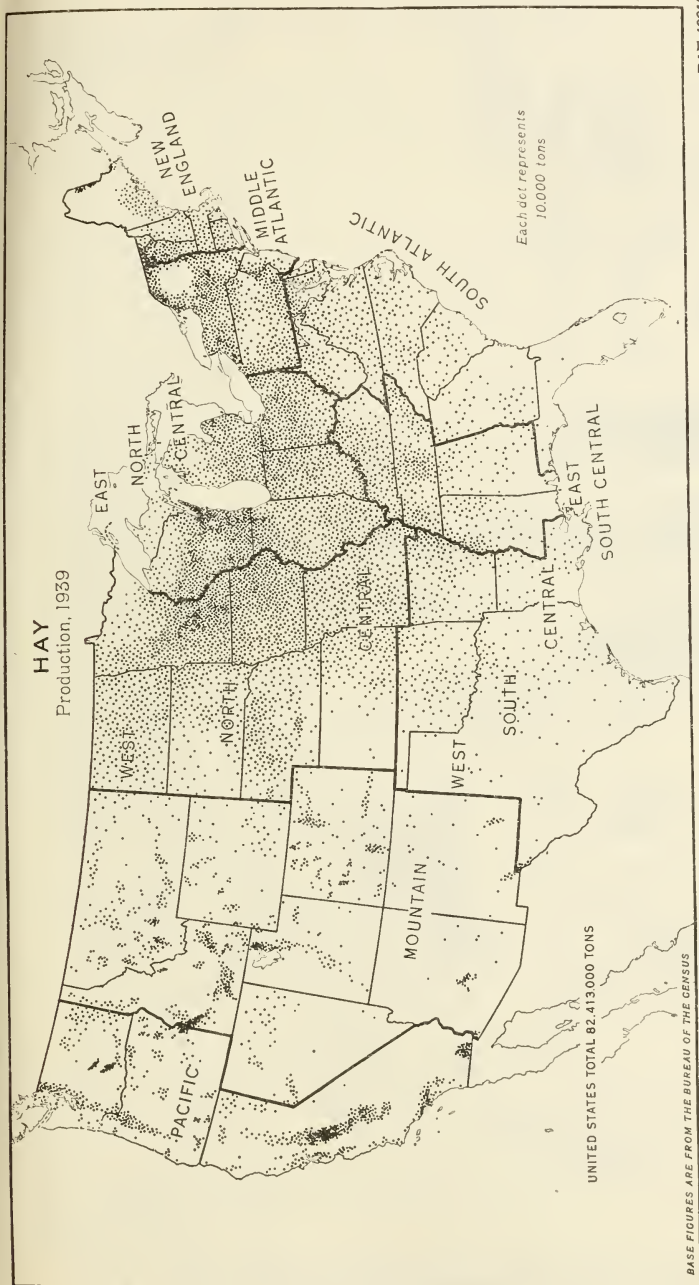
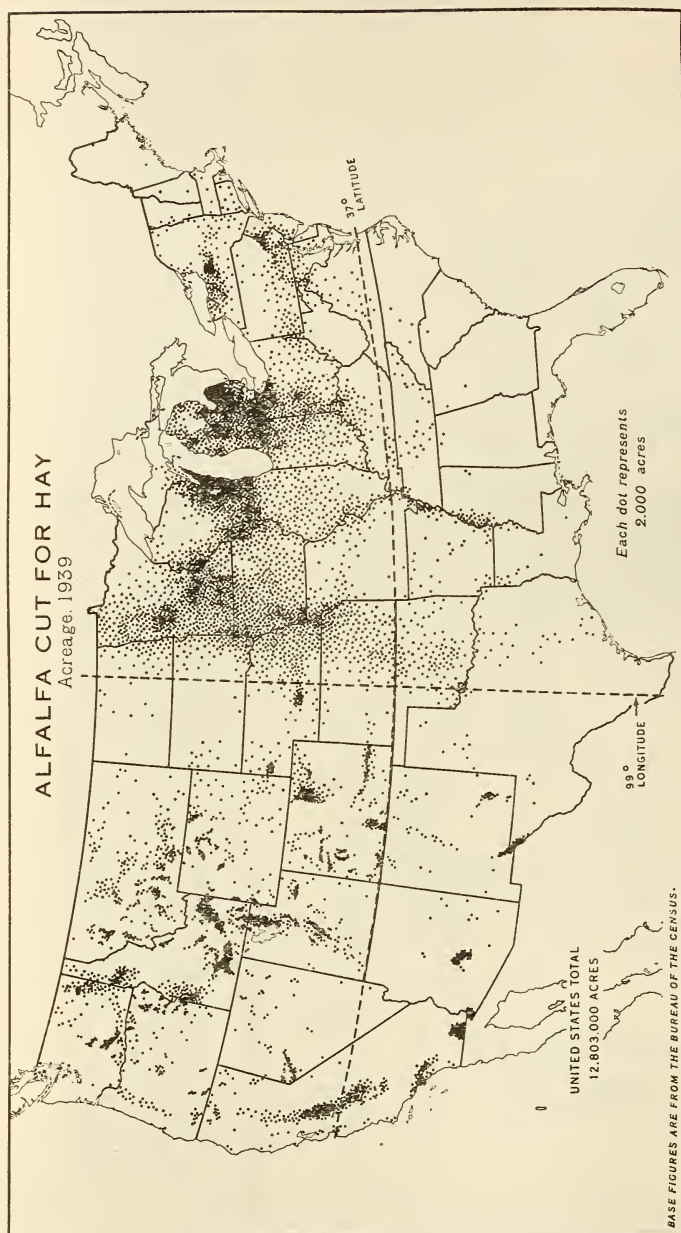
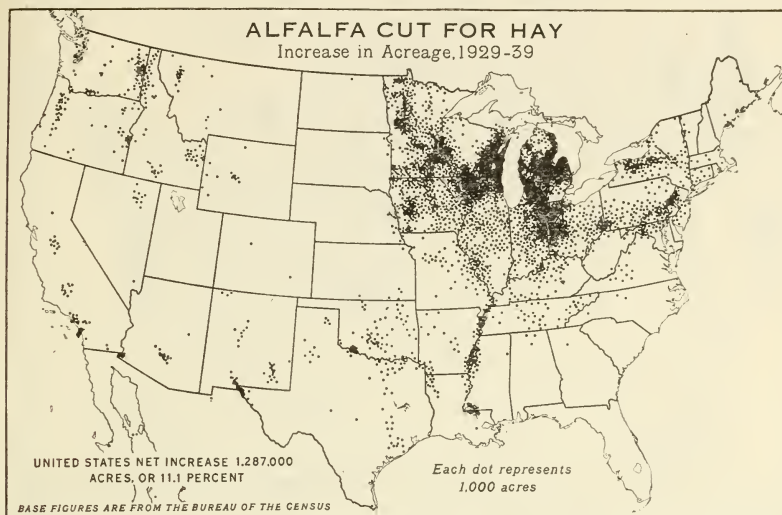


FIGURE 63.—In 1939 the hay crop was 3.4 percent less than in 1929. The total production of hay was 82,413,000 tons, with about 88 percent of this tame hay, and 12 percent wild hay. The production of hay, by geographic divisions, was distributed as follows: West North Central, 22,401,000 tons, or about 27 percent; East North Central, 18,855,000 tons, 23 percent; Mountain, 9,058,000 tons, 11 percent; Pacific, 7,557,000 tons, 9 percent; Middle Atlantic, 7,377,000 tons, 9 percent; East South Central, 5,554,000 tons, 7 percent; South Atlantic, 4,511,000 tons, 5 percent; West South Central, 4,068,000 tons, 5 percent; and New England, 3,032,000 tons, about 4 percent. The three leading States in the production of hay are Minnesota, with 6,131,000 tons, Wisconsin, 5,863,000 tons, and Iowa with 5,051,000 tons.



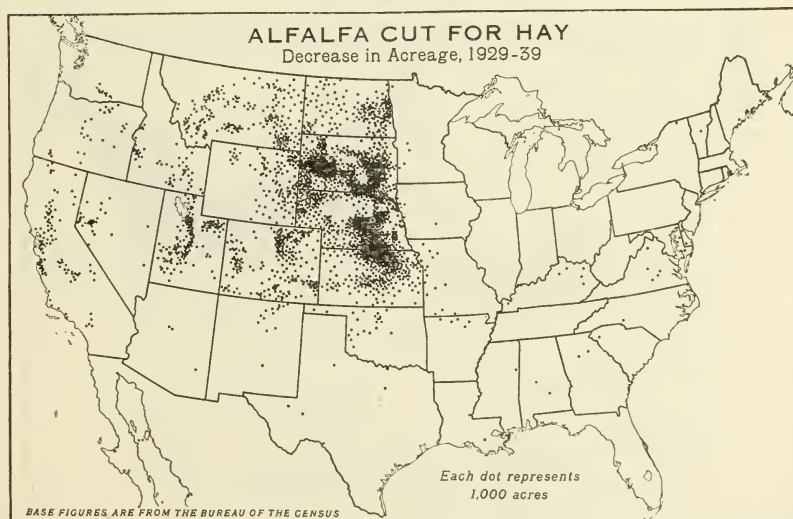
BAE 39943

FIGURE 64.—The acreage of alfalfa cut for hay in 1939 constituted about 20 percent of the total acreage of hay. Alfalfa is the leading hay legume in the United States and is used exclusively for a cover and green-manure crop in very limited areas. In rotations, alfalfa is recognized as one of the more important soil-improving crops. Many types of alfalfa are grown and are adapted to various soils and climatic conditions. Resistance to disease and insect injury is high. Alfalfa thrives best on well-drained soils that are rich in lime and have an alkaline reaction. It produces two to six cuttings a year, yielding a large tonnage in the irrigated lands of the West. The three leading States in the acreage of alfalfa cut for hay are Michigan, with 1,213,000 acres; Minnesota, 1,184,000 acres; and Wisconsin, 1,137,000 acres.



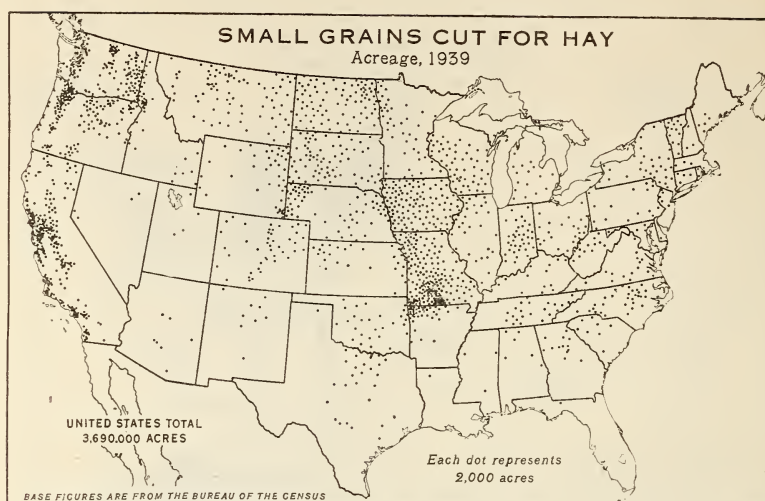
BAE 39937

FIGURE 65.—The heaviest increase in acreage of alfalfa between 1929 and 1939 occurred in the limestone regions east of the 97th meridian and north of the 37th parallel where its culture has been increasing steadily. In this region there was an increase of 3,500,000 acres, or 108 percent, whereas the total United States net increase was 1,287,000 acres, or 11 percent.



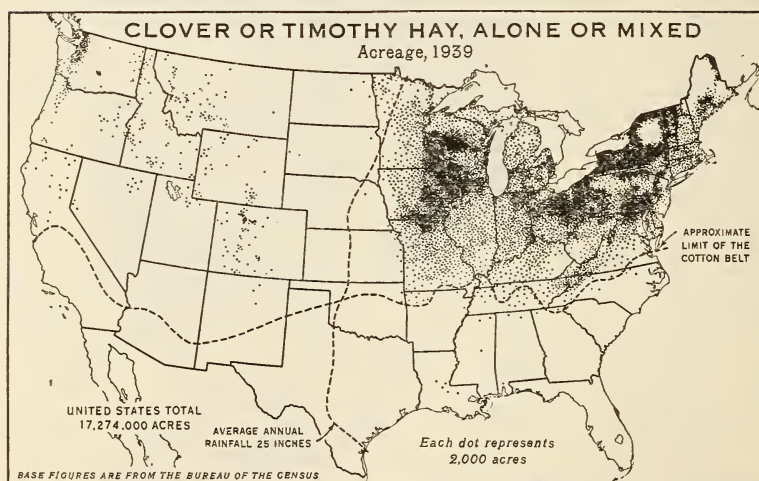
BAE 39938

FIGURE 66.—The decrease in acreage of alfalfa between 1929 and 1939 occurred in the area west of the 97th meridian and north of the 37th parallel. This is in the northern part of the arid West, opposite and adjacent to the eastern area in which acreage increased. The decrease amounted to about 36 percent in this area and was probably due chiefly to an unfavorable season in the Great Plains, and a reduced supply of irrigation water in the West.



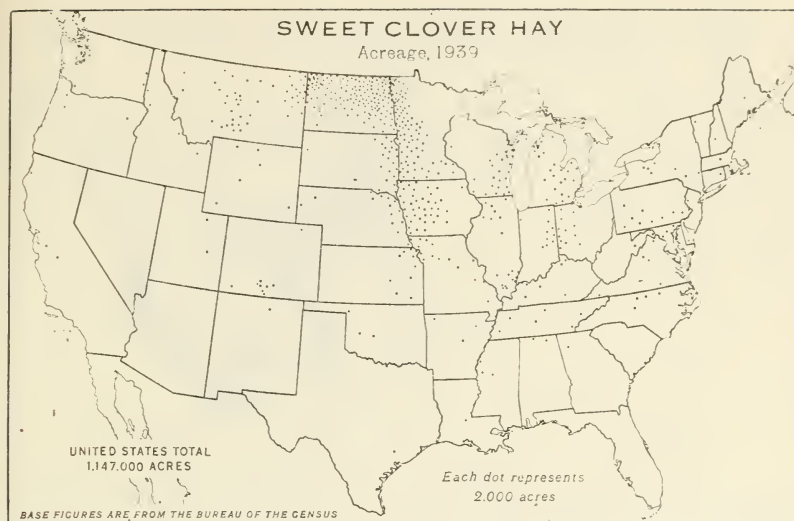
BAE 39860

FIGURE 67.—Acreages of small grains (oats, wheat, barley, and some rye), cut for hay are scattered throughout the United States, with the heaviest concentration in the Pacific Coast and the Great Plains States. The acreage of small grains cut for hay is usually larger in dry seasons when moisture is not sufficient for the grain to mature properly, and when larger acreages are needed to supply the demand for hay.



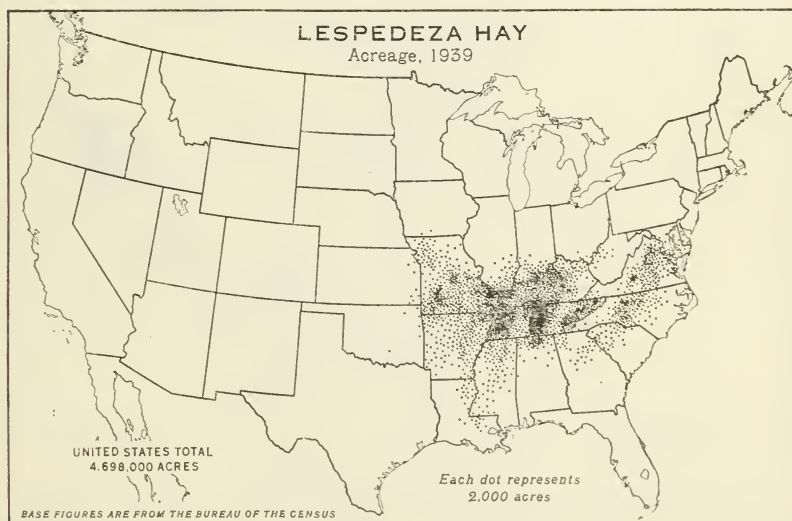
BAE 39862

FIGURE 68.—The acreage of clover or timothy hay, alone or mixed, was 26.2 percent of the total acreage of hay in 1939. With the exception of a small acreage in the Western States, practically all the red clover and timothy hay is produced in the humid North, bounded on the west by the 25-inch annual rainfall line and on the south by the northern limit of the Cotton Belt. The three leading States are New York with 2,363,000 acres; Wisconsin, 2,040,000 acres; and Pennsylvania, 1,685,000 acres.



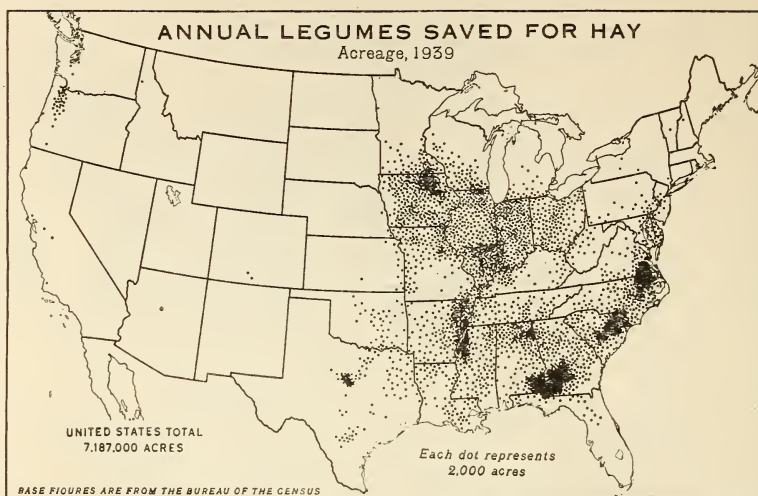
BAE 39856

FIGURE 69.—Sweetclover is a legume high in feed value. It fits well in crop rotations, helps retard erosion, and adds humus and nitrogen to the soil. Its deep taproot produces a large tonnage of organic matter. Sweetclover will grow almost anywhere, but requires at least 17 inches of rainfall suitably distributed, and sufficient lime in the soil. In 1939 the acreage of sweetclover hay made up only 1.7 percent of the total hay acreage, but sweetclover is one of the important forage crops in the northern United States.



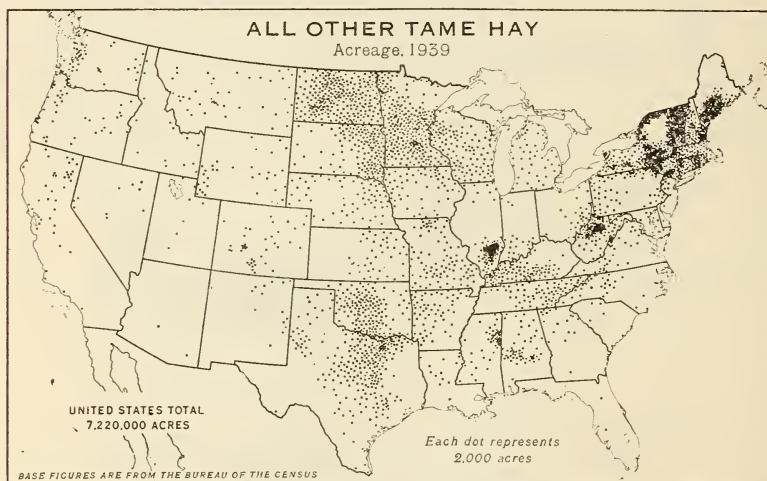
BAE 39857

FIGURE 70.—The lespedezas or bush clovers consist of three principal species, two annual and one perennial. The acreage of annual lespedezas is spread over the South. The northern limit of common lespedeza follows an irregular line from southern Iowa to southern Pennsylvania and New Jersey. The lespedezas will grow on poor, worn soils but the best crops are produced on moist bottom lands. They improve the soil tremendously and also improve the yields of subsequent crops such as small grain, corn, and cotton. Most of the lespedeza hay is consumed at home or in the neighborhood where it is produced.



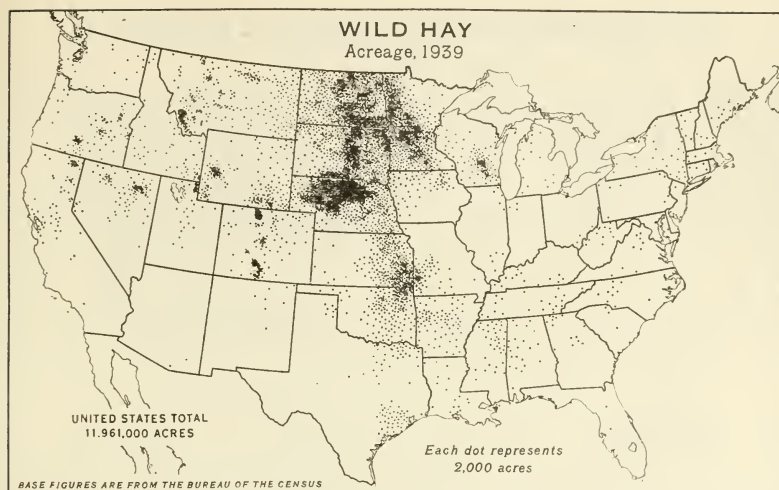
BAE 39859

FIGURE 71.—Annual legumes harvested for hay in 1939 included soybeans, cowpeas, peanuts, vetches, velvetbeans, Canada peas, Austrian Winter peas, and other minor leguminous crops. The acreage of soybeans cut for hay has been increasing steadily in the Corn Belt States, North Carolina, and Mississippi. Acreages of peanuts and cowpeas harvested for hay have been increasing in the South.



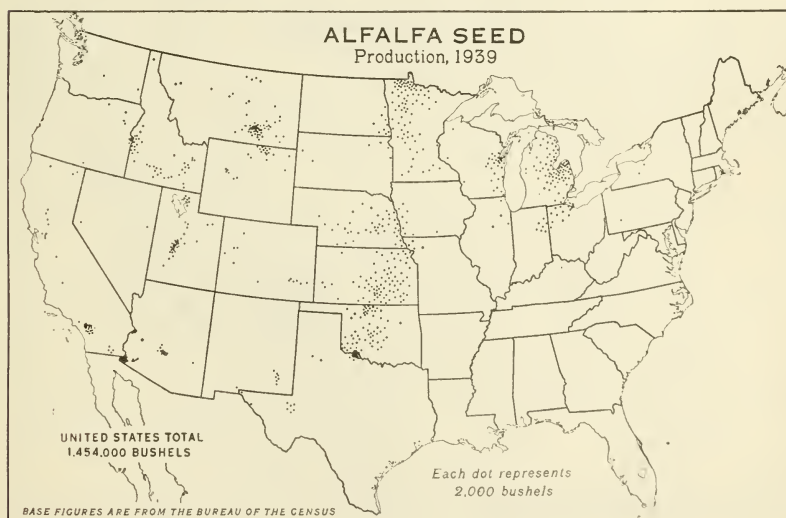
BAE 39861

FIGURE 72.—In 1939 acreage of all other tame hay was 35 percent greater than in 1929. In the New England and Middle Atlantic States the hay is mostly redbud, orchard grass and bentgrass; in southern Indiana and Illinois it is largely redbud; in the South Atlantic and Gulf States it is Johnson grass, crabgrass, and Bermuda grass, and in the Great Plains and the prairie States it is chiefly millet and Sudan grass. Bluegrass and orchard grass are most important in Virginia, West Virginia, Kentucky, and Tennessee.



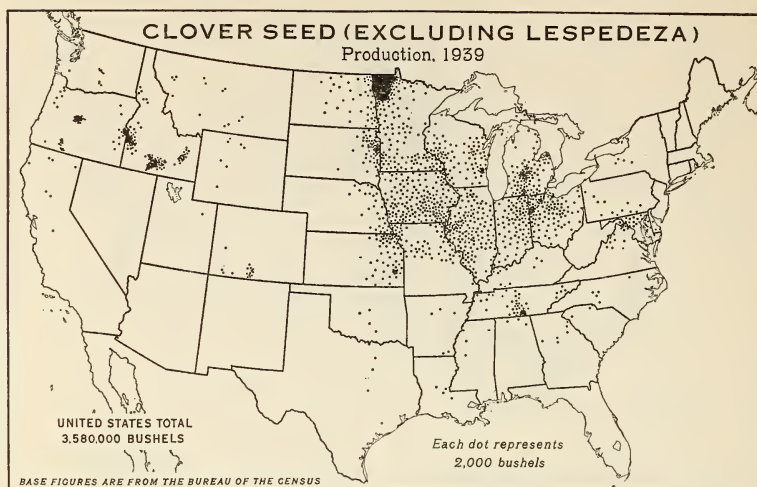
BAE 39858

FIGURE 73.—The acreage of wild hay is most important in the northern Great Plains and the contiguous portions of the spring wheat belt. The wild-hay crop is gradually becoming relatively less important. During the last census decade, 1929–39, the acreage of wild hay decreased nearly 11.5 percent, whereas the acreage of most of the other forage crops increased. In the West, the climate is so dry that grass does not usually grow high enough to cut, except in the high mountain valleys. The native or wild grasses are more important for pasture than for hay.



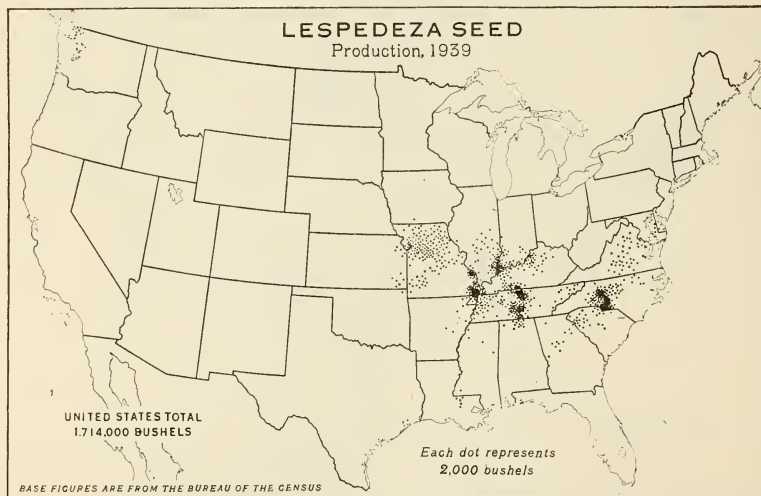
BAE 42043

FIGURE 74.—The production of alfalfa seed has increased from about one-third of a million bushels in 1919, with a farm value of about \$6,000,000 to nearly a million and a half bushels in 1939 with a farm value of over \$15,500,000. Commercial seed production in the United States is confined largely to irrigated sections of regions which have light rainfall. Alfalfa does not produce seed well under humid conditions, hence it is more profitable for eastern farmers to purchase seeds than to grow them.



BAE 42337

FIGURE 75.—The production of clover seed in 1939 was 3,580,000 bushels, 43 percent was sweetclover seed, and the remainder was other clover seed, excluding lespedeza. Red clover constituted about 88 percent of the other clover seed and amounted to about one-half of the total clover-seed production but was not reported separately. Minnesota was the largest producer in 1939 with 848,000 bushels, four-fifths of which was sweetclover. Iowa was second largest producer, with 351,000 bushels, only 30 percent of which was sweetclover. Red clover, alsike, crimson, mammoth, white, etc., were reported as just clover seed.



BAE 42141

FIGURE 76.—The common, kobe, or Tennessee No. 76 lespedeza seed when ripe is harvested with a seed pan attached to the rear of the cutter bar. A man or boy walks behind the pan and rakes the lespedeza over the perforated cover, thereby dislodging the ripe seed. Not all lespedeza seed is harvested with the pan. The Korean lespedeza is usually cut with a mower when the plants are brown. The grain separator can be used for threshing. Korean lespedeza yields as much as 20 bushels per acre whereas the others range from 10 to 12 bushels per acre.

ANNUAL LEGUMES AND SUGAR CROPS

The regular and systematic return of organic material to the soil is one of the most vital activities in good soil management. The rotation of crops, including the use of grasses and legumes is probably the most important step in soil maintenance. Crop rotation implies crop diversification and livestock production. This type of farming system keeps the soil in good physical condition, prevents soil erosion, improves soil fertility, and, when legumes are used, adds organic nitrogen to the soil.

TABLE 2.—*Annual legumes: Acreage, for all purposes, except plowed under for green manure, United States, Census years, 1909-39*

Crop	1939		1929		1919	1909
	Grown alone	Grown with other crops	Grown alone	Grown with other crops		
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Soybeans.....	8,965	2,494	1,962	949	113	2
Cowpeas.....	2,909	3,805	776	718		
Peanuts.....	2,512	1,082	1,559	888	1,125	870
Velvetbeans ¹	291	2,222	89	1,145	1,143	13
Other dry field beans ²	1,587	4	1,746	120	1,162	803

¹ Vetches, velvetbeans, mung, and horse beans, for 1939.

² Navy, pinto, lima, and other ripe field beans.

The total acreage of annual legumes listed in table 2, is for all purposes except for plowing under as green manure. The acreage of annual legumes cut for hay was not reported for separate crops, but the total for 1919 was 1,847,000 acres; for 1929, 3,068,000 acres; and for 1939, 7,187,000 acres. Feed for livestock is the principal use of legumes for harvest and pasture. They contain certain vitamins and minerals, as well as a high protein and fat content, which make them excellent for feed.

Seeds of the peanut, pea, and bean plants are excellent human food and are consumed by many persons throughout the country. Cowpeas are used for food to some extent in the South.

Peanuts and soybeans are important agricultural products essential to the war production program. Acreages of these two legumes have increased greatly since 1939, and will probably continue to increase. They furnish the valuable fats and oils that cannot be imported now and that are vitally needed for food and for processing many of the materials of war.

In 1929 in continental United States, we produced about 20 percent of the sugar we consumed, whereas in 1939 we produced about 32 percent of our consumption. The 1939 total beet, sugarcane, and maple sugar production of continental United States was about 2,262,000 tons, of which nearly 78 percent was from sugar beets; 22 percent from sugarcane, and less than 0.1 percent from maple sap. Of the sugar consumed in the United States in 1939, 68 percent was imported: 36 percent came in duty free from insular possessions—Hawaii, Puerto Rico, and the Philippine Islands—and the remainder came from Cuba.

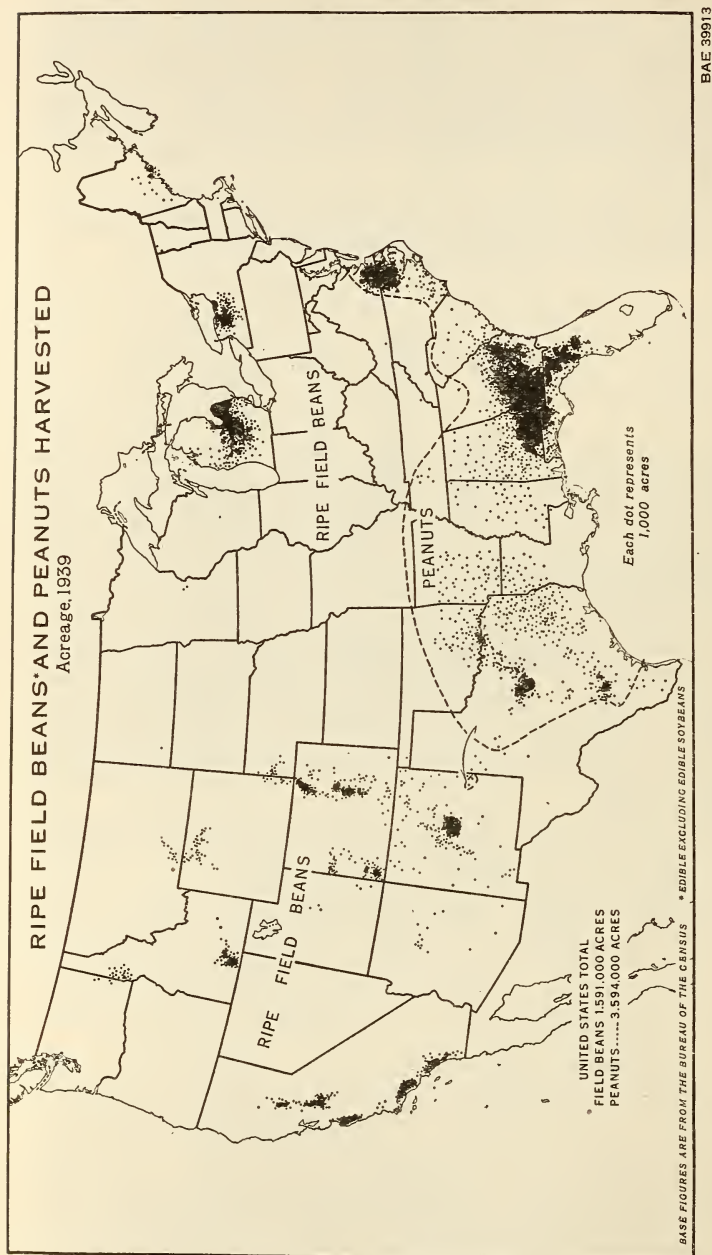
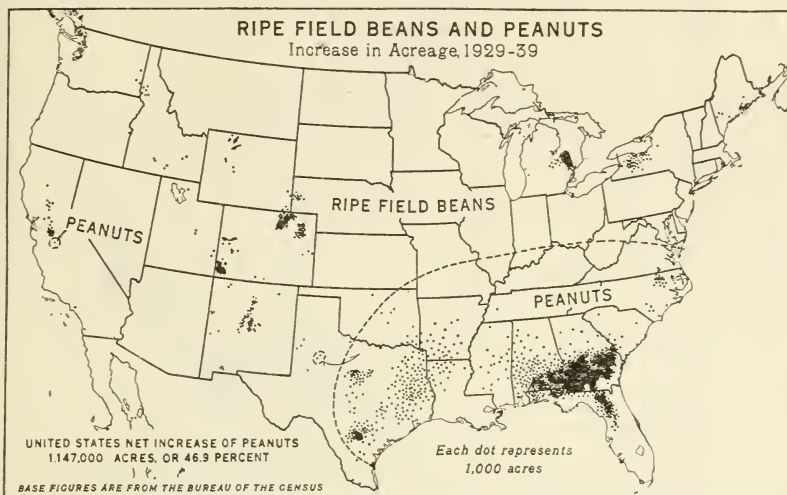
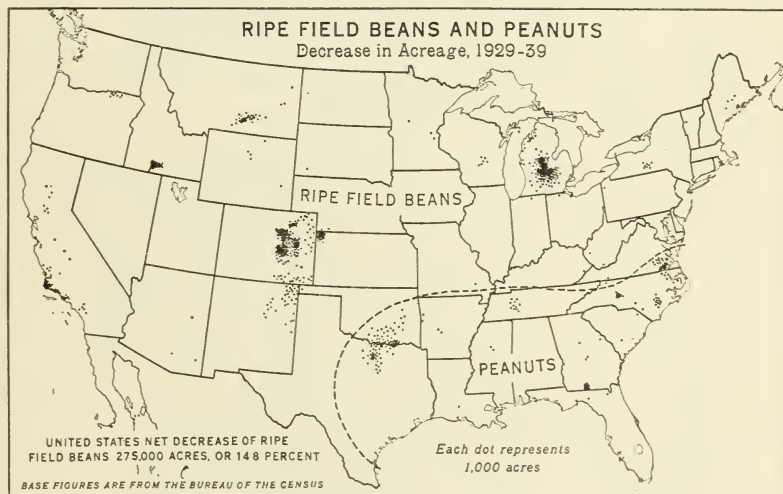


FIGURE 77.—The leading varieties of field beans in the Ontario-Honoye soil area of western New York, and in the Saginaw Valley and adjacent uplands of southern Michigan, are the White Pea, Robust, and Wells Red Kidney beans; in eastern Colorado and New Mexico varieties grown are mostly native Mexican or pinto beans. In California, commercial limas, white beans, and blackeye beans are raised; and in areas of Idaho, Montana, and Wyoming, Great Northerns and other varieties are grown. The greatest area of peanut production lies in Alabama, Georgia, and Florida where the smaller Spanish variety is grown. It is used mostly as feed for stock or is made into oil and peanut butter. Peanuts from the Virginia-North Carolina district are used mostly for human consumption. The peanut market at Suffolk, Va., is the largest in the world.



BAE 42142

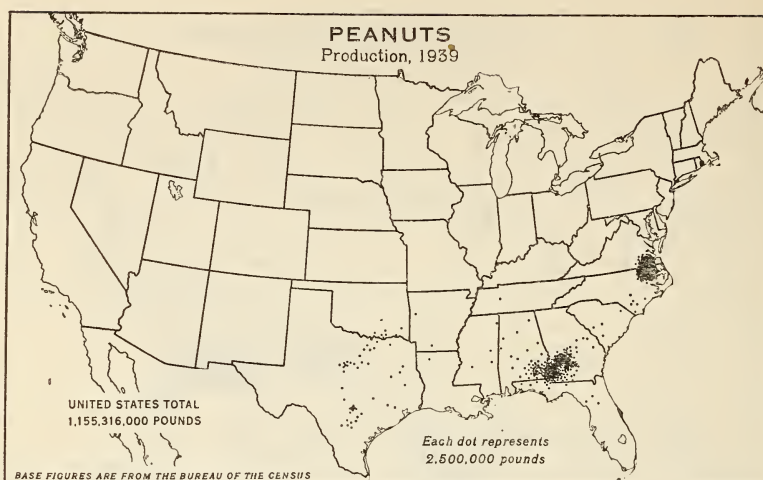
FIGURE 78.—The increase in acreage of beans in 1934 over 1929 was further extended in 1939 to include various areas in the Western States. Between 1929 and 1939, the acreage of peanuts increased nearly 47 percent. This increase occurred mostly in Alabama, Georgia, Florida, and in the western Cotton Belt where the total acreage of peanuts has steadily increased.



BAE 42143

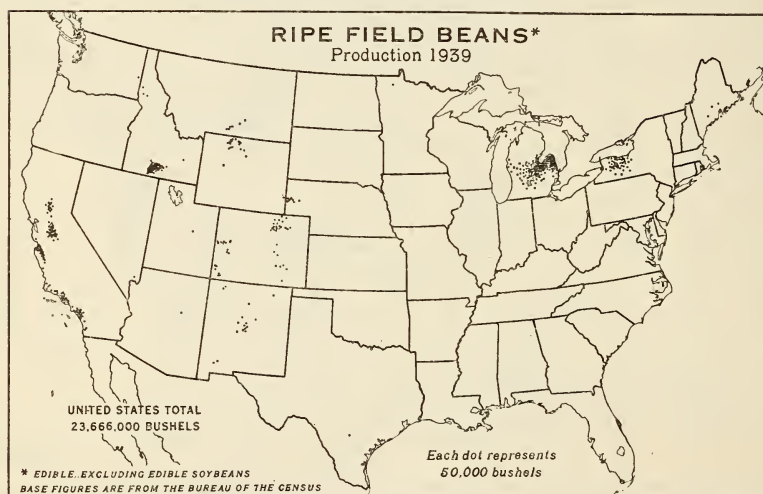
FIGURE 79.—The acreage of beans decreased about 15 percent between 1929 and 1939. Heavy decreases took place in the acreage of pinto beans in the Great Plains and in acreage of the White Pea, Robust, and Wells Red Kidney beans in south central Michigan. Slight decreases occurred in small areas in the Western States.

The most important areas in which acreage of peanuts decreased were areas near Norfolk, Va., Duplin and Rowan Counties, N. C., Brooks County, Ga., the small peanut area of western Tennessee, and the Oklahoma and Texas area adjacent to the Red River.



BAE 39933

FIGURE 80.—The production of peanuts in 1939 was 21 percent greater than in 1929. They are one of the important cash crops in southeastern Virginia, north-eastern North Carolina, southwestern Georgia, and southeastern Alabama. The large peanuts commonly sold in hulls on the open market are from Virginia and North Carolina. It is common practice in the South to use peanuts as feed for hogs. More than 300 different products have been developed from peanuts. Peanuts are chiefly used in the manufacture of oil, peanut butter, candy, and other confectionary products, salted peanuts, and for stock feed.



BAE 42229

FIGURE 81.—Michigan produced 8,043,000 bushels of edible ripe field beans in 1939, the largest crop from any State. These were chiefly White Pea, Robust, and Wells Red Kidney beans. California was the second largest producer with 5,691,000 bushels of beans, including nearly the entire commercial crop of limas in the United States, and a part of the crop of white beans and blackeye beans.

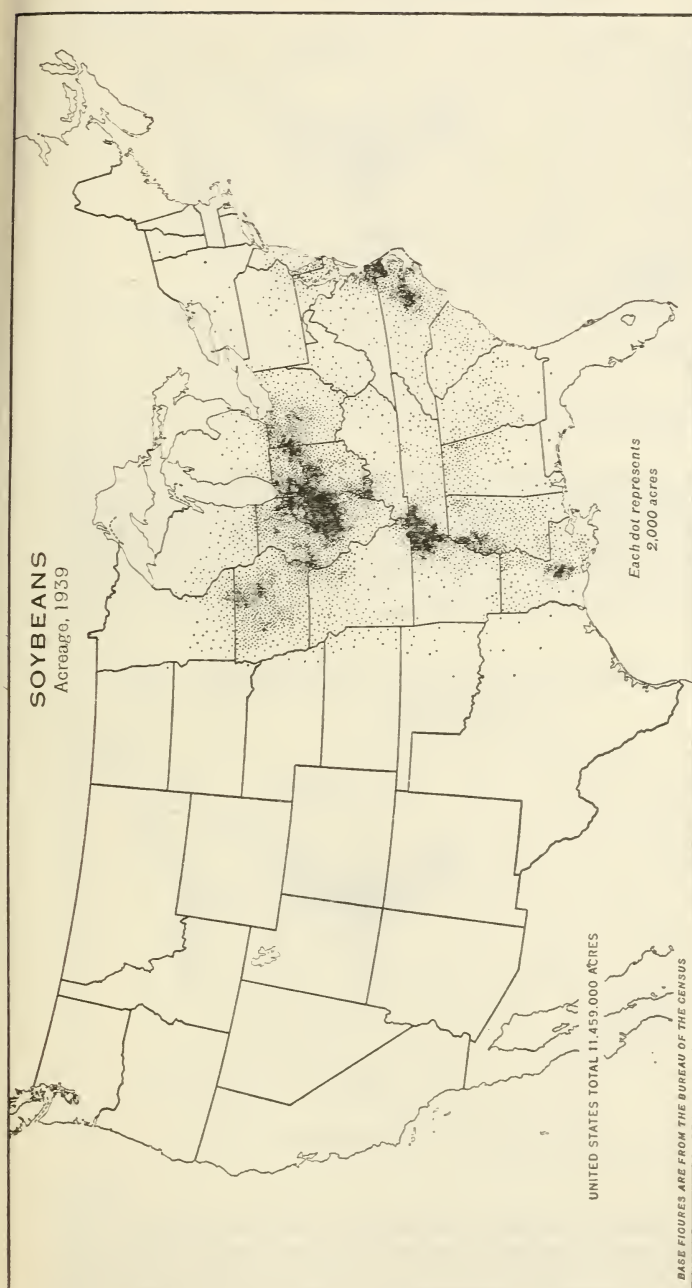
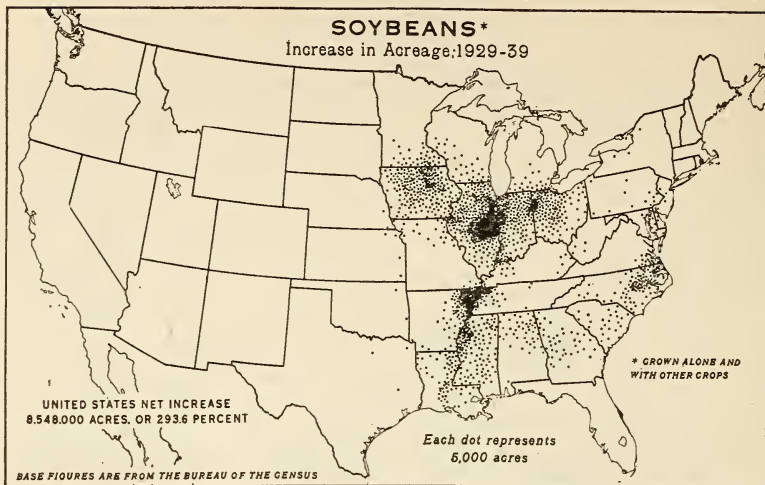
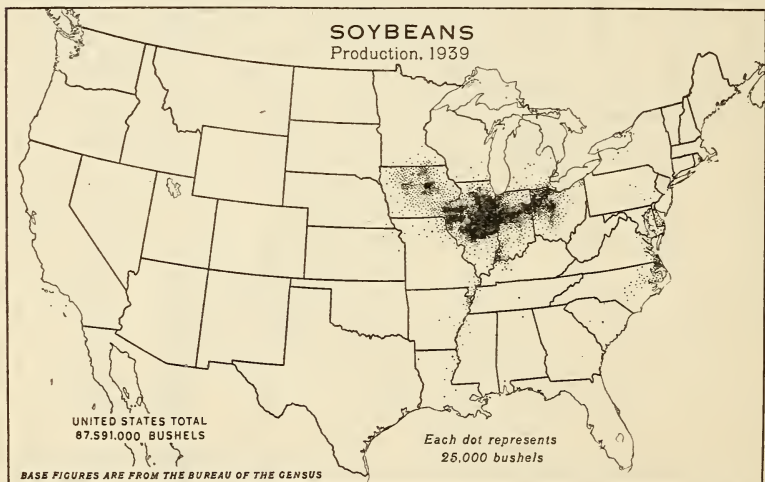


FIGURE 82.—The rise in acreage of soybeans has been one of the most striking agricultural developments in the United States. The total in 1907 was 57,000 acres; in 1929 it was 2,911,000 acres; and by 1939 it was nearly four times the acreage of 1929. Soil conditions favorable to corn are normally well suited to soybeans. The Corn Belt States, Illinois, Indiana, Iowa, Ohio, and Missouri had 57 percent of the acreage and 93 percent of the production of soybeans. Illinois had the largest acreage in 1939, 2,647,000 acres, and produced 44,772,000 bushels of soybeans. Practically no soybeans are grown west of 97° longitude but production of corn is rather extensive as far as 105° longitude. New varieties developed and adapted to areas previously having little acreage are now extensively grown, especially in the lower Mississippi valley, Alabama, and Georgia.



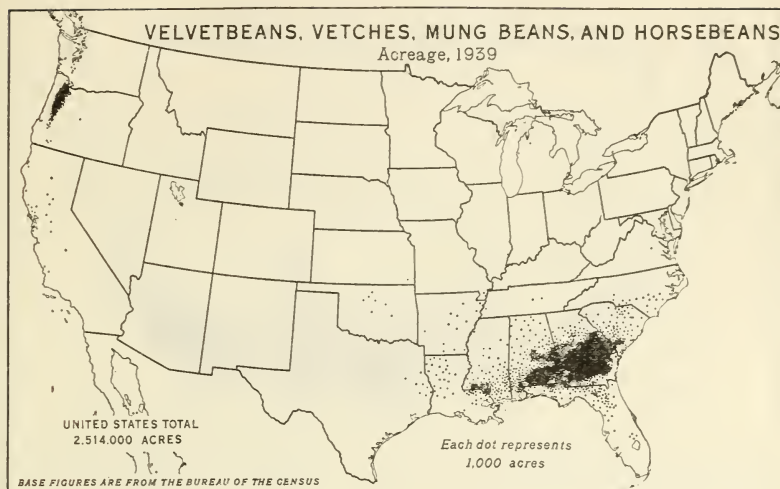
BAE 42213

FIGURE 83.—The valuable oil content and nutritional values of the various varieties of soybeans have been more fully recognized since 1929, thus creating a demand for greater production of soybeans. The acreage of the varieties of soybeans best adapted to the soil and climate of each locality throughout the soybean area has been increased. This expansion between 1929 and 1939 was over 8,500,000 acres, or nearly 300 percent, and, during this period, was the largest relative increase in acreage of soybeans in any country in the world.



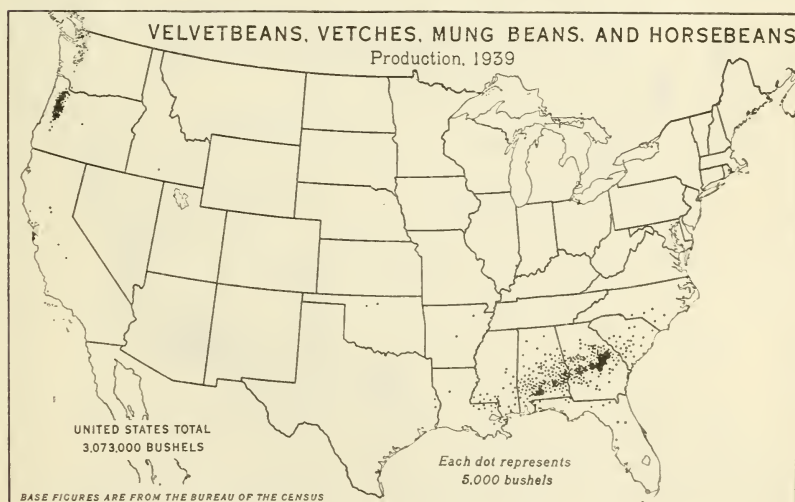
BAE 93701

FIGURE 84.—The production of soybeans increased by more than 900 percent between 1929-39. The chief commercial area lies in Illinois, Indiana, and neighboring States. In the United States soybeans are used primarily for forage and pasture purposes, but industrial uses for oil and meal are increasing. Soybean food products, flour, and various industrial products are utilizing more and more of the soybean crop.



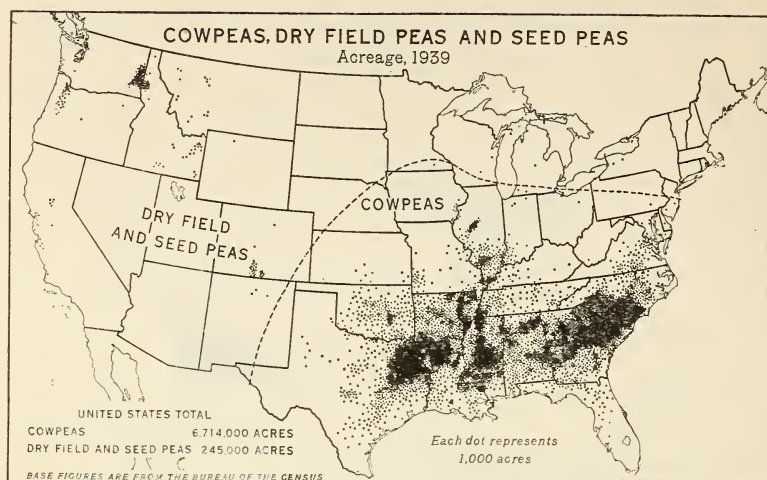
BAE 42339

FIGURE 85.—The acreage of velvetbeans, vetches, mung beans, and horsebeans, grown with other crops in 1939, was nearly 90 percent of the total acreage of these crops. Georgia with 1,415,000 acres, had the largest acreage; Alabama was second, with 470,000 acres; and Oregon third, with 181,000 acres. These legumes are used for forage, grazing, cover, and green-manure crops.



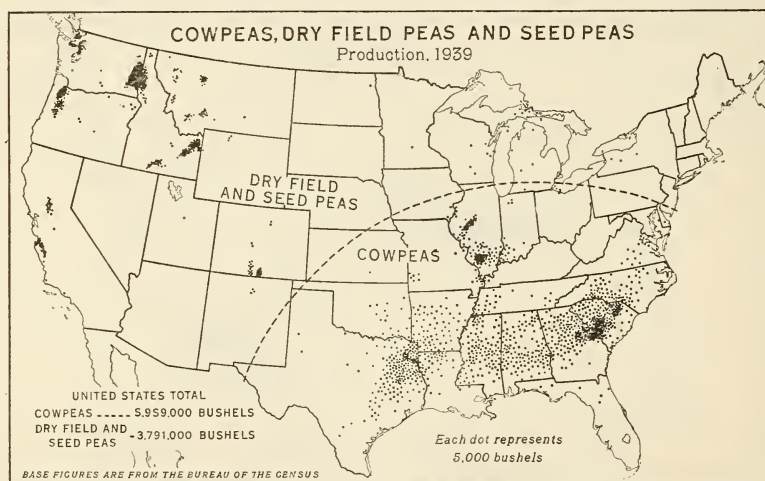
BAE 42350

FIGURE 86.—The production of 3,073,000 bushels of velvetbeans, vetches, mung beans, and horsebeans in 1939, represent beans harvested for seed and beans. This production came mostly from the acreage of beans grown alone, which amounted to about 10 percent of the total acreage. Velvetbeans, one of the most vigorous of the annual legumes, are important as a grazing crop for cattle and hogs and for soil improvement. Vetches are exceedingly useful as cover and green-manure crops.



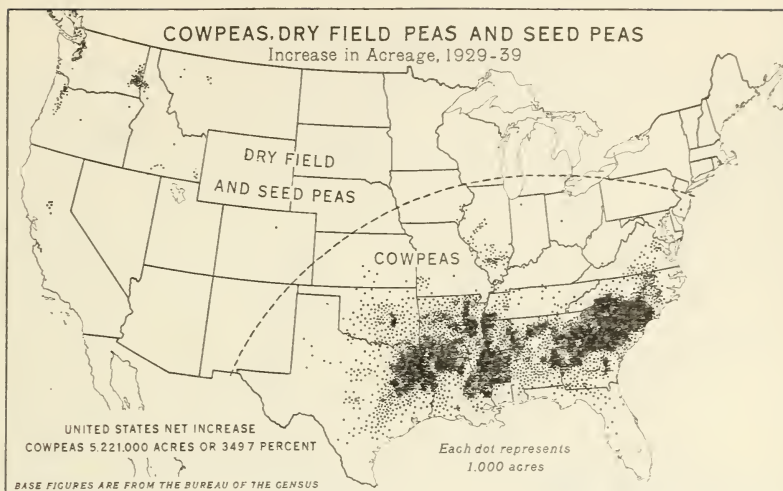
BAE 42230

FIGURE 87.—The cowpea is the principal annual legume of the South and is grown mainly for soiling, hay, ensilage, and pasturage of all kinds of stock and it is a good soil-improving crop. In the Southern States the seeds, chiefly the black-eyed and white varieties, have been commonly used for human food. Cowpea hay is as nutritious as hay from other legumes and is relished by all farm stock. Acreage of dry field and seed peas is mostly confined to the irrigated areas and fertile valleys of the West. They are used for seed, forage, cover, and green manure.



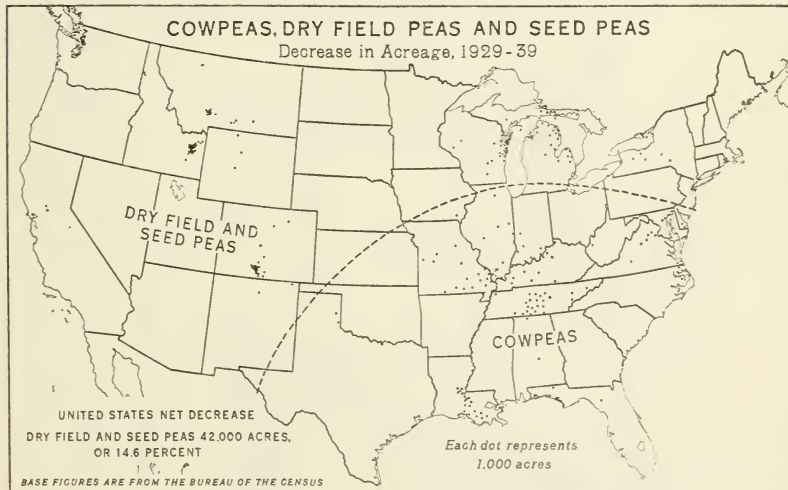
BAE 42270

FIGURE 88.—Cowpeas require little attention and will grow on all types of arable soil. More than any other legume, cowpeas have been used for soil improvement because they have a marked effect upon the crops that follow, and succeed under a great diversity of conditions. Various methods of harvesting cowpeas for seed are employed in different production areas. Hand picking is the most common way of saving the seed, especially the edible peas such as the black-eyed and white varieties. A larger proportion of the acreage of dry field and seed peas are harvested for seed than is the case with cowpeas.



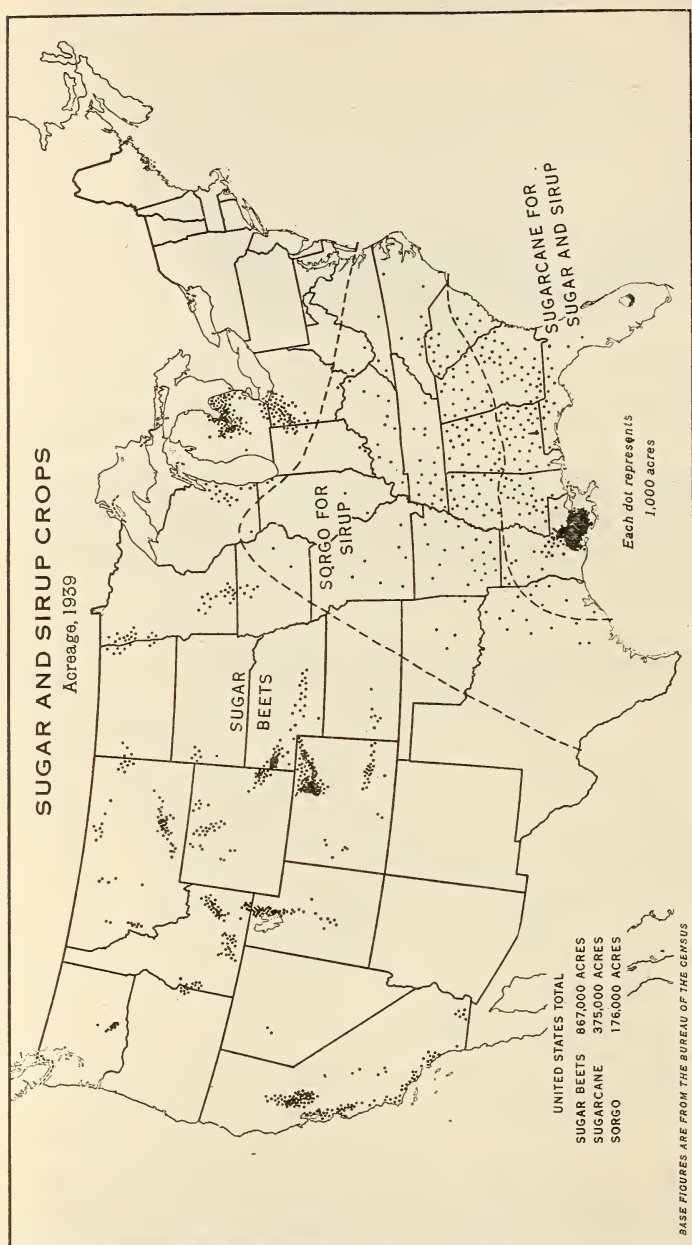
BAE 42271

FIGURE 89.—The heavy increase of nearly 350 percent, or over 5,000,000 acres of cowpeas between 1929 and 1939 reflects the importance of this legume in agricultural production in the Southeastern States. The increase in the acreage of dry field and seed peas occurred in the Western States with the greater part in the Columbia Plateau of Washington and Idaho, and in the Willamette Valley of Oregon.



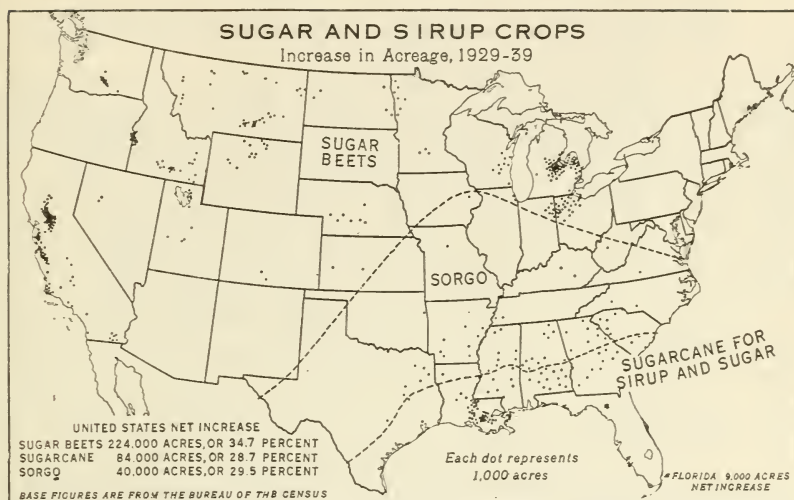
BAE 42272

FIGURE 90.—The net decrease of about 15 percent in the acreage of cowpeas and dry field and seed peas from 1929 to 1939 was greatly contributed to by the heavy decreases in Wisconsin, Michigan, and New York. Heavy decreases also occurred in the San Luis Valley of Colorado, eastern Idaho, and southwest Montana. The majority of the small areas in which the acreage of cowpeas decreased during this period was in the Nashville Basin of Tennessee, in the bottomlands of the Mississippi River in Louisiana, and in the vicinity of the Ohio and Mississippi Rivers.



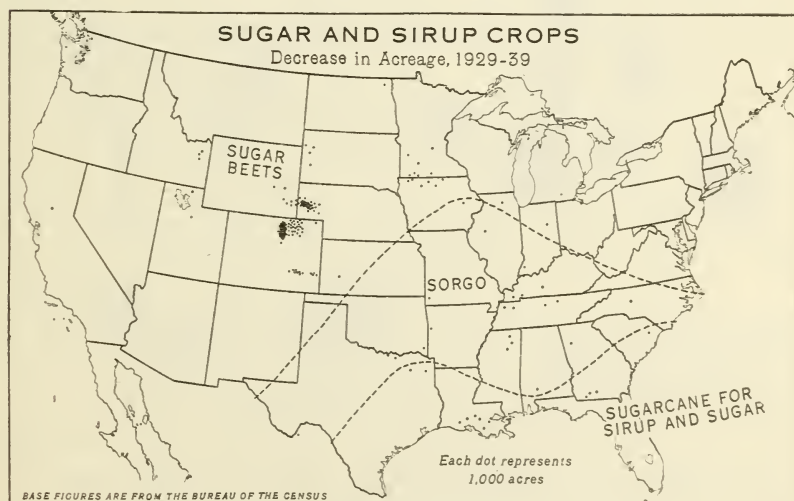
BAE 39914

FIGURE 91.—Sugar is extracted from the juices of the sugar beet, and from sugarcane. The product, when pure, is identical in all properties and for all purposes. Successful production of sugar beets requires an adequate supply of moisture, warm days, and fairly cool nights during the growing season. The beet-sugar factories are located chiefly between the isotherms of 67° and 72° F. mean summer temperature (May–September). Production of sugarcane requires a relatively high temperature and considerable sunshine with plenty of soil moisture during the growing season. Sugarcane grown for sugar production in continental United States has been produced chiefly on the fertile alluvial soils of the lower Mississippi Valley in Louisiana, and around Lake Okeechobee in Florida. Sorgho is used to make sirup, which is chiefly a farm product, with only small quantities entering the commercial market. Sugar is not made from sorgho.



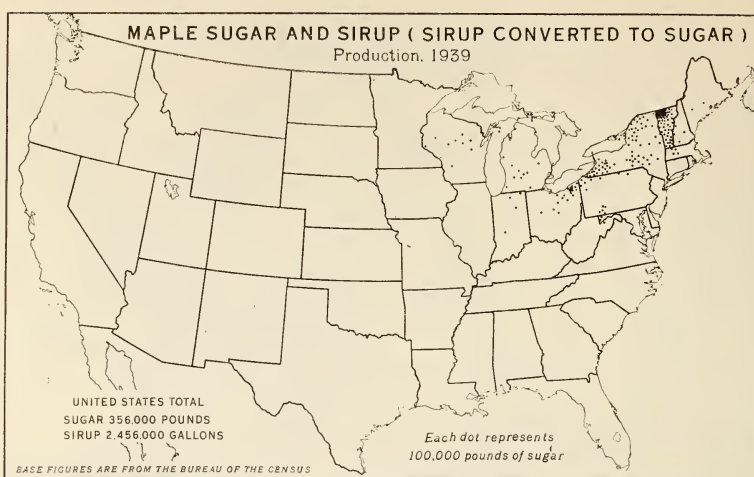
BAE 42027

FIGURE 92.—Increases in acreage of sugar beets from 1929 to 1939 occurred mostly in the valleys of California, the Saginaw Valley of Michigan, the lake plains in northwestern Ohio, along the Platte River in central Nebraska, in the irrigated valleys of Utah and Idaho; and in Washington, Wyoming, and Montana. There was a heavy increase in acreage of sugarcane in Louisiana, and a general increase in the acreage of sorgo in the southern part of the Sorgo Belt. These increases were due to various causes, such as a higher protective tariff, increased import duties on sugar from the Philippines, the introduction of disease-resistant plants, and an increasing demand for sugar in the United States since the depression.



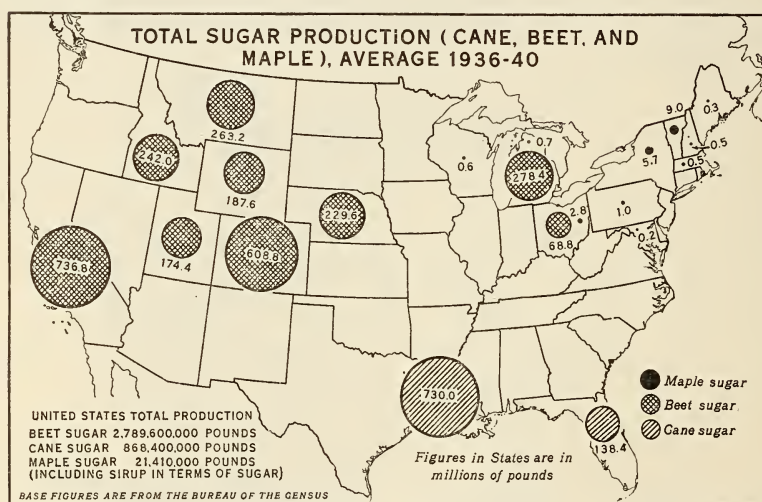
BAE 42028

FIGURE 93.—The decrease in acreage of sugar beets was heavy in the Scotts Bluff area of Nebraska and in irrigated valleys of Colorado, but only a slight decrease occurred in acreage of sugar cane in Louisiana, Georgia, Texas, and Florida. The decline in acreage of sorgo was small but almost universal.



BAE 42370

FIGURE 94.—The production of sirup and sugar on a commercial scale comes almost entirely from the sap of the sugar and black maples. This production is confined to the northeast United States where sugar maples grow. The gradual rise in temperature during the spring months in the Northern States are essential to a profitable flow of sap from the maple trees. New York had the largest production of sirup and sugar in 1939; Vermont ranked second; and Ohio third.



BAE 42427

FIGURE 95.—The average production of beet sugar for the period 1936-40 was more than 3 times that of cane sugar and over 130 times that of maple sugar. The beet-producing States in order of importance are California, Colorado, Michigan, Montana, Idaho, Nebraska, Wyoming, Utah, and Ohio. Louisiana produces over three-fourths of the sugarcane but the importance of Florida is increasing. Vermont, New York, and Ohio are the three largest maple-producing States. Production of beet and cane sugar has been increasing whereas production of maple sugar has remained about the same, or has decreased slightly.

POTATOES, SWEETPOTATOES, AND VEGETABLES

Potatoes are grown primarily in cold and moist climates. They are extensively grown in the humid northern sections and in the irrigated districts of the West. The commercial production areas are located in the Dairy Belt; along the eastern seaboard from Norfolk, Va., to Long Island, N. Y.; Aroostook County, Maine, and in the irrigated and fertile valleys of the West. More than half of the entire potato crop is sold, and the remainder is used for food or seed on the farms on which they are grown. The United States acreage of potatoes remained about the same during the 10-year period, 1930-40, but production increased nearly 20 percent, due to increase in yield per acre.

Sweetpotatoes are grown chiefly in the South. The commercial area is largely in the Cotton Belt, northwestern Tennessee, eastern Virginia, Maryland, Delaware, and southern New Jersey. During the 10-year period, 1930-40 sweet potato acreage, production, and consumption per capita (disappearance) all increased slightly.

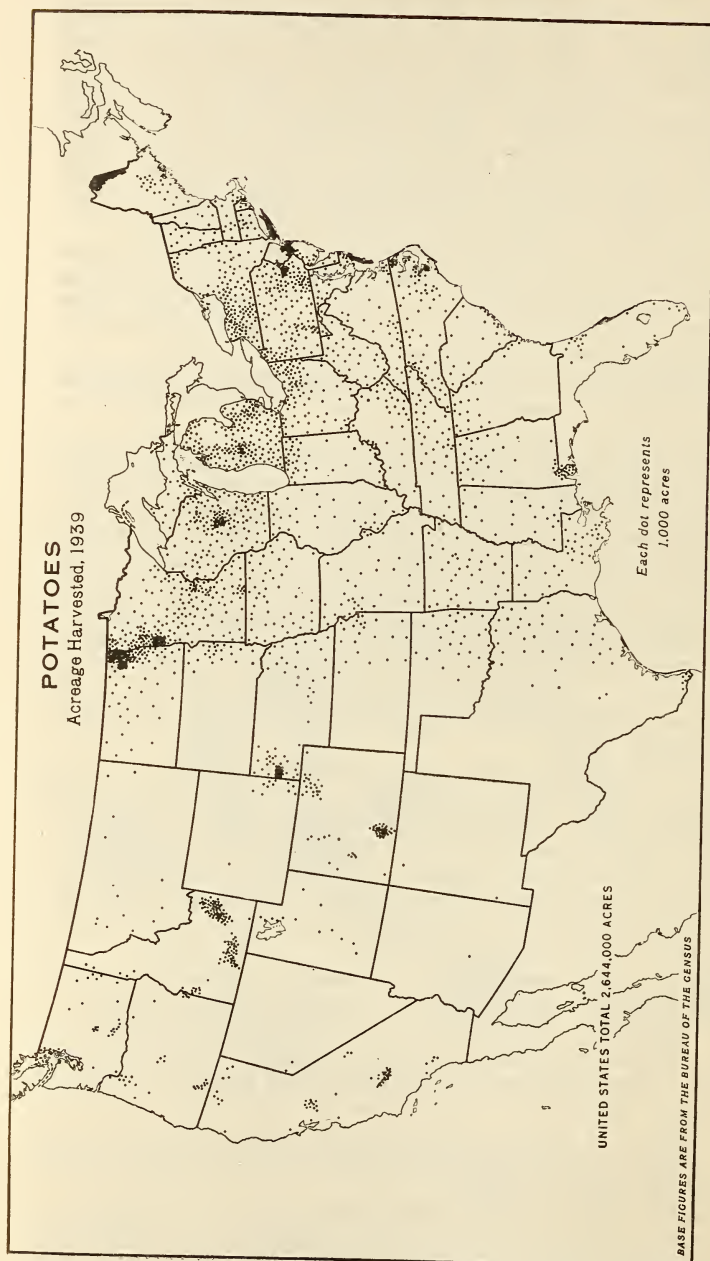
Vegetables are grown over a wide range of well-drained, friable, and permeable soils from fine sands to clay loams. Peat and muck are important for certain of the vegetable crops.

The chief area of commercial vegetable production extends from Long Island, N. Y. to Norfolk, Va. Another important area extends from the Finger Lake region of Western New York along Lake Erie to Detroit. A third area extends around the southern half of Lake Michigan and northward into Michigan, Wisconsin, and Minnesota. The production of winter vegetables occurs mostly in the area extending across Florida, Georgia, South Carolina, Alabama, Mississippi, Louisiana to Texas, westward into Arizona, and in the very important section in the Sacramento-Stockton, Los Angeles, and Imperial Valley districts of California. Heavy acreages of vegetables are also grown for home use throughout many States, primarily in regions of small or subsistence farming.

The average per capita consumption of fresh vegetables for the period 1927-31 was 271 pounds, and for the period 1935-36-1939-40 it was 284 pounds. The largest relative increases in per capita consumption in a recent period over the predepression period were for carrots from 6.4 pounds to 8.7 pounds, or 37 percent, asparagus from 1.5 to 2.0 pounds, or 36 percent; beans (snap) from 5.2 to 7.0 pounds, or 36 percent; corn from 6.8 to 8.8 pounds, or 29 percent; and cauliflower from 2.2 to 2.8 pounds, or 29 percent.

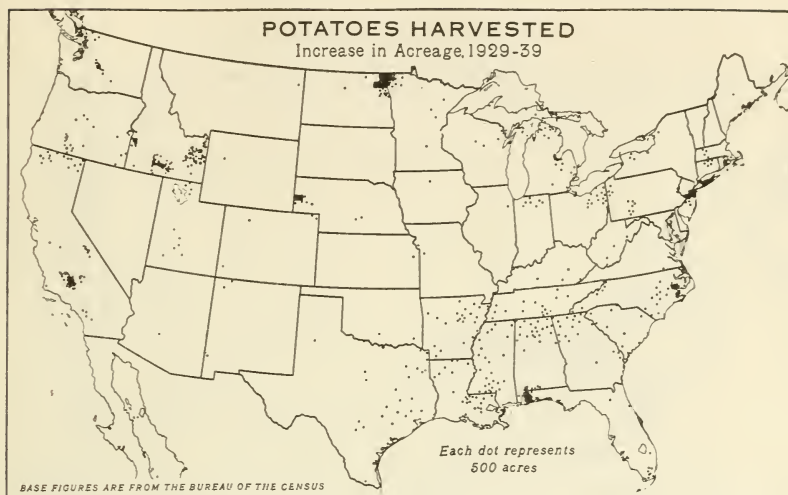
Estimated per capita consumption of canned vegetables for the 1927-28-1931-32 period was 19 pounds, whereas that for 1935-36-1939-40 was 23 pounds. The increase in per capita consumption was largest in tomato pulp and juice which increased from 1.0 to 3.5 pounds, or 256 percent. Beets increased from 0.44 to 0.63 pounds, or 44 percent; snap beans from 1.58 to 1.88 pounds, or 19 percent; peas from 4.2 to 4.9 pounds, or 17 percent; spinach from 0.79 to 0.90 pounds, or 13 percent. Pumpkin and squash decreased 13 percent and tomatoes 2 percent between these two periods.

Heavy increases in per capita consumption of various vegetables, both fresh and canned, no doubt is due somewhat to the publicity given to their importance in balanced diets through indication of the vitamins contained in each vegetable as well as the calory content per serving. Vegetables are important in helping to balance the diets of our fighting forces at home and abroad.



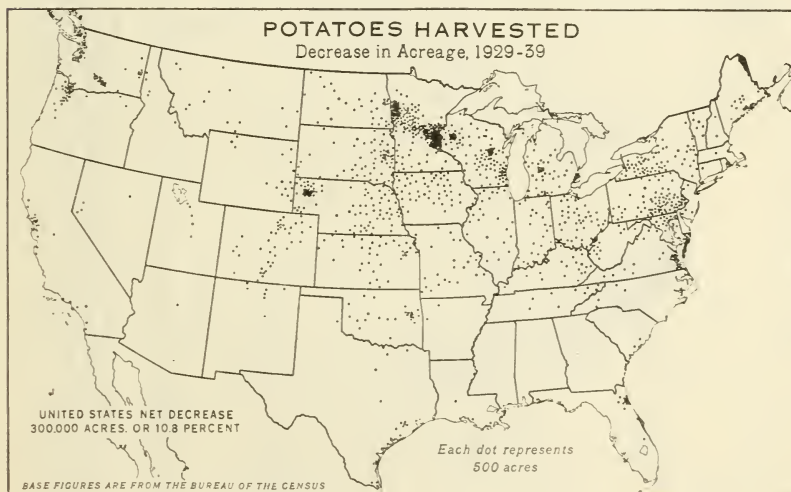
BAE 39729

FIGURE 96.—The acreage of potatoes in the United States extends from the tip of Florida to the top of Maine and completely across the Nation from East to West. The early, intermediate, and late crops are the chief crops produced; they are harvested at various times from January to late October. The early or truck-crop acreage is in the South. The late crop is produced almost exclusively in the North and constitutes over 90 percent of the total potato production of the United States. In 1939, Minnesota had the largest acreage of potatoes with 222,000 acres; Michigan was second, with 219,000; and New York third with 189,000 acres. Many of the potato-producing areas are in districts of sandy loam or silt loams—soils having deep mellow subsoil. Although the potato stands second only to wheat as a human food, the per capita consumption has decreased from 196 pounds in 1909 to 140 pounds in 1939.



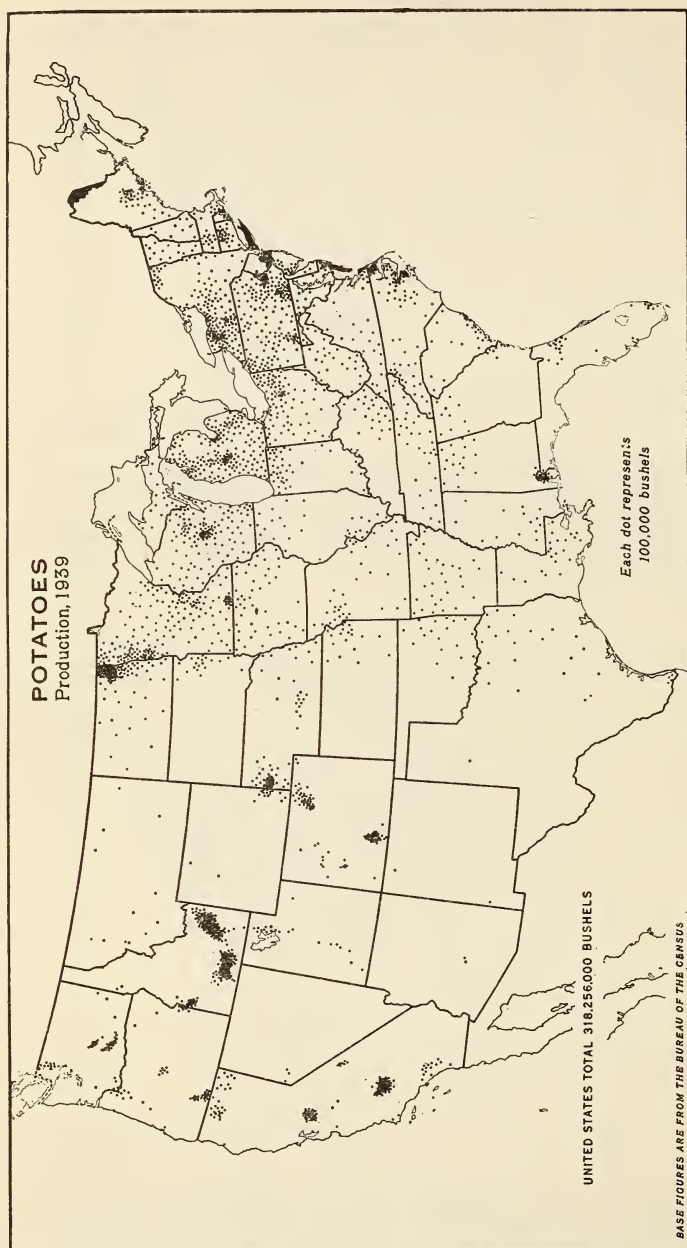
BAE 39980

FIGURE 97.—The increase in acreage of potatoes from 1929 to 1939 was general throughout the South. Heavy increases occurred in irrigated districts of southern Idaho, and in Pacific Coast States. The increase was large in several counties in the northern Red River plains of North Dakota and Minnesota and in Scotts Bluff County, Nebr., Long Island, N. Y.; Central New Jersey; North Carolina; and Baldwin County, Ala.



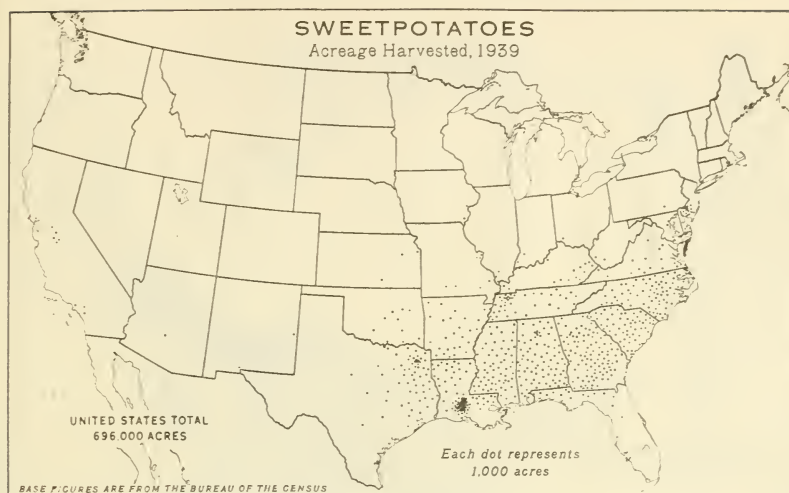
BAE 39981

FIGURE 98.—Between 1929 and 1939, the net decrease in acreage of potatoes was about 300,000 acres, or nearly 11 percent. The decrease occurred generally throughout the potato-producing areas of New England, the Middle Atlantic States, and the East North Central States. Heavy decreases occurred in the northern Great Plains area where weather conditions were unfavorable, and in several Western States in which the water supply for irrigation purposes was limited.



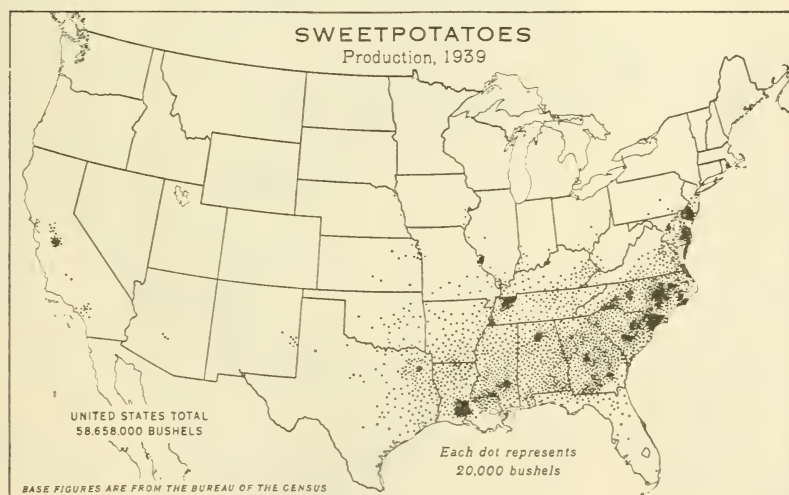
BAE 42044

FIGURE 99.—Three principal crops of potatoes are produced in the United States, an early, an intermediate, and a late crop. The early and intermediate crops are normally marketed as soon as harvested, but if prices are low and demand is weak the harvesting and marketing of the intermediate crop may overlap that of the late crop. Usually about one-third of the late crop moves to consuming centers when harvested, and the remainder is stored as a reserve supply for winter and spring.



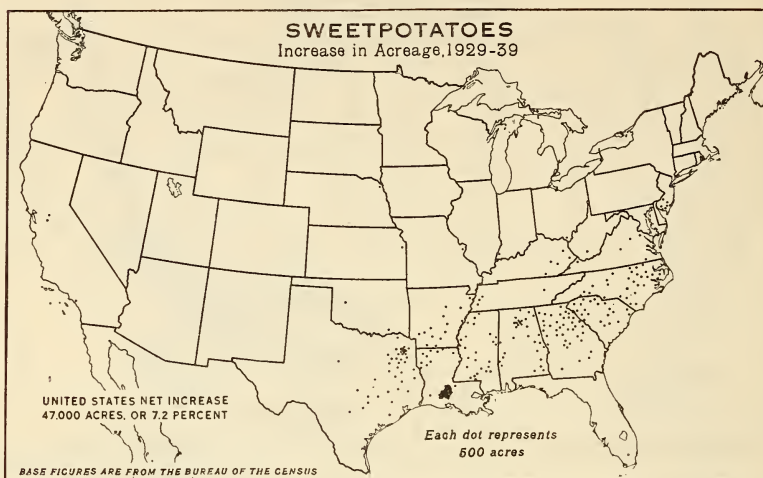
BAE 39864

FIGURE 100.—More than 90 percent of the acreage of sweetpotatoes is in the Southern States, where they are one of the principal food crops. Sweetpotatoes thrive best in a climate that has a growing period of at least 4 months, a moderate rainfall during this period, warm nights, and plenty of sunshine. An ideal soil for sweetpotatoes is a light well-drained sandy loam with a clay subsoil. The moist-fleshed sweetpotatoes, especially the popular varieties such as the Nancy Hall and the Puerto Rico, are sometimes called “yams.”



BAE 42144

FIGURE 101.—Sweetpotatoes are grown for home use under a wide range of conditions, but commercial production is limited to sections in which soil, climate, and marketing conditions are favorable. Heavy commercial producing areas are located in southern Louisiana, western Tennessee, eastern North Carolina, and South Carolina, on the Eastern Shore of Maryland and Virginia, and in southern New Jersey. Southern and eastern markets are usually well supplied with sweetpotatoes, but in many sections of the North and West the people have not become accustomed to using them.



BAE 42187

FIGURE 102.—Between 1929 and 1939, the acreage of sweetpotatoes increased about 47,000 acres, or over 7 percent. Increases were moderate in general and occurred throughout the South. In Acadia, Evangeline, St. Landry, Lafayette, and St. Martin parishes in Louisiana, and in a few counties in northeast Texas, heavy increases occurred.



BAE 42188

FIGURE 103.—Between 1929 and 1939, most of the decrease in acreage of sweetpotatoes consisted of small decreases in counties scattered widely throughout the South. In Weakley and Henry Counties, Tenn., Accomac and Northampton Counties, Va., and Kent and Sussex Counties, Del., heavy decreases occurred.

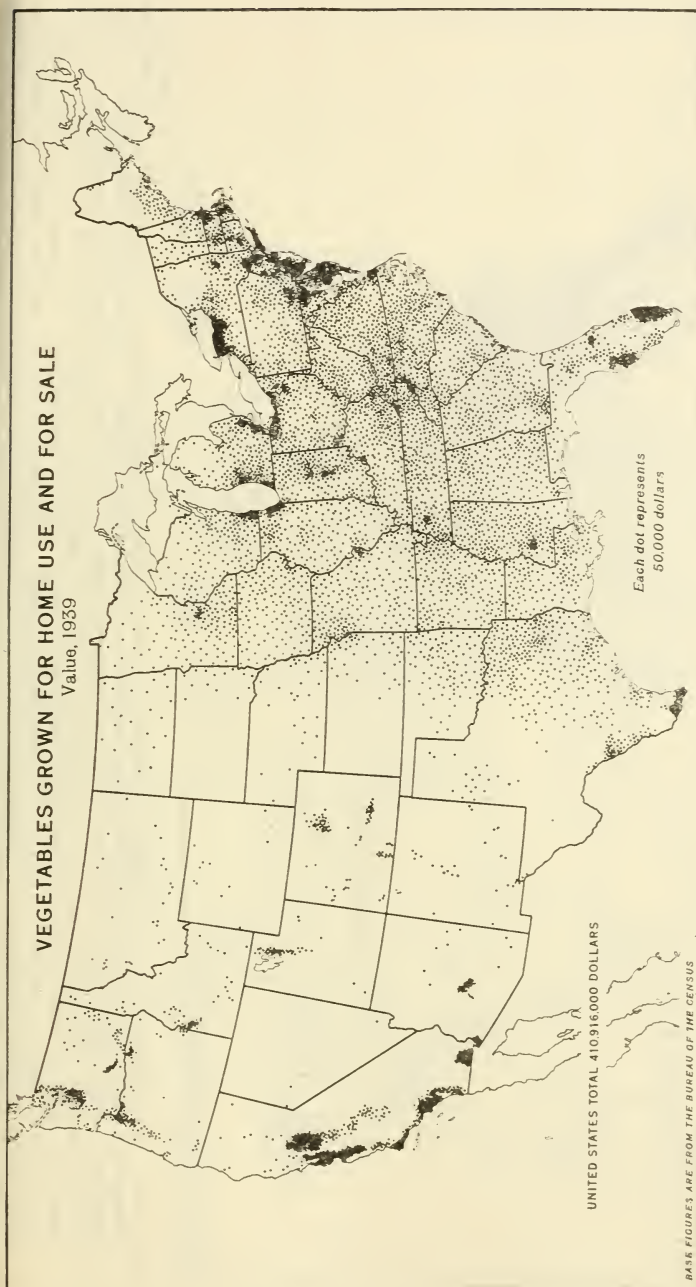


FIGURE 104.—Vegetables for sale are grown chiefly in areas concentrated around the urban centers, whereas those grown for home use are distributed throughout the rural areas, especially in the East. Some of the important acreages for commercial purposes are located along the Atlantic coast from Norfolk, Va., north to Long Island, N. Y., in the area south of Lake Ontario in western New York, in the areas around the western end of Lake Erie, and along the southern half of Lake Michigan. Important areas of winter vegetables are found in the States bordering the Gulf of Mexico, chiefly in southern Texas and Florida, and in the fertile valleys and irrigated districts of Southern California, and Arizona. The value of vegetables grown for home use and for sale in 1939 was \$410,916,000, or 21 percent less than in 1929.

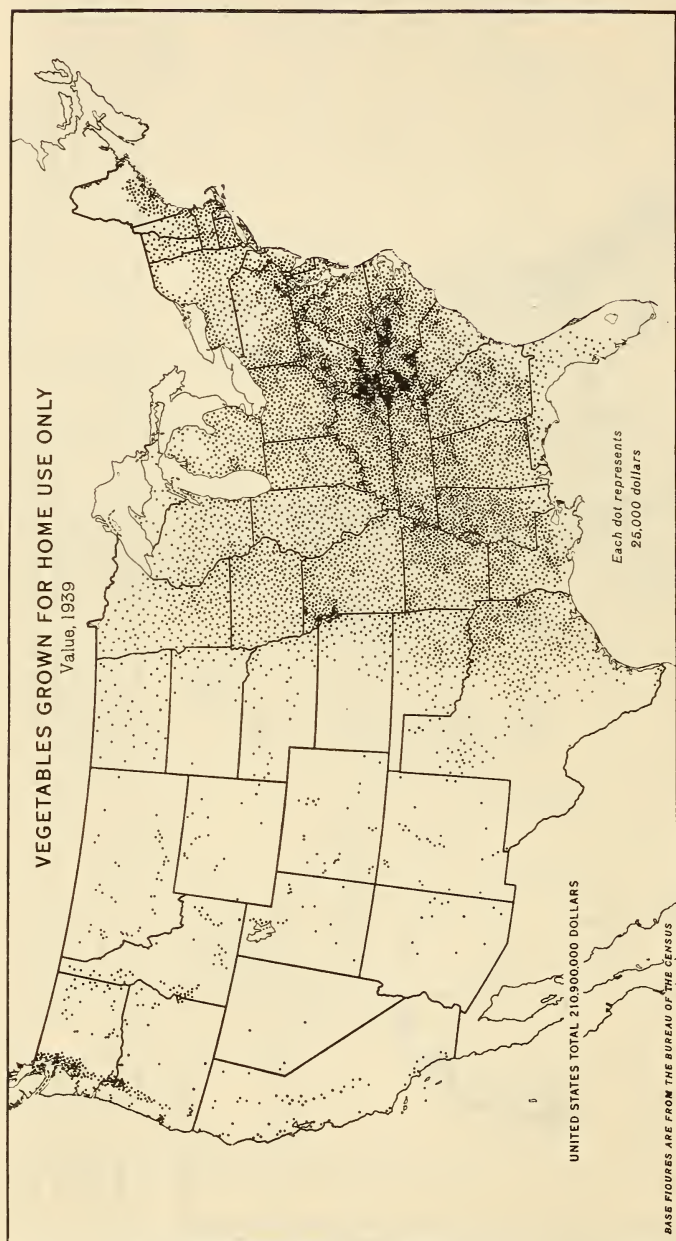


FIGURE 105.—In 1939 returns from 4,816,000 farms indicated that vegetables grown for home use were valued at \$210,900,000 whereas in 1929, returns from 4,360,000 farms indicated a value of \$226,000,000. The South Atlantic States in 1939 produced vegetables for home use, valued at \$51,673,000, or about 25 percent of the United States total value. North Carolina had the largest crop which was valued at \$14,774,000; Texas was second with a crop worth \$11,945,000; Virginia third with an \$11,863,000 crop, and Mississippi fourth with a crop valued at \$11,006,000. The areas of greatest acreages of vegetables for home use are in the southern Appalachian region of the South Atlantic and East South Central States, in the lower Mississippi Valley, and in northwest Missouri, and eastern Texas. Aggregate larger acreages of vegetables are grown on self-sufficing farms in these areas and on farms in the South where agricultural programs have stressed the importance of growing vegetables for home use.

BAE 42225

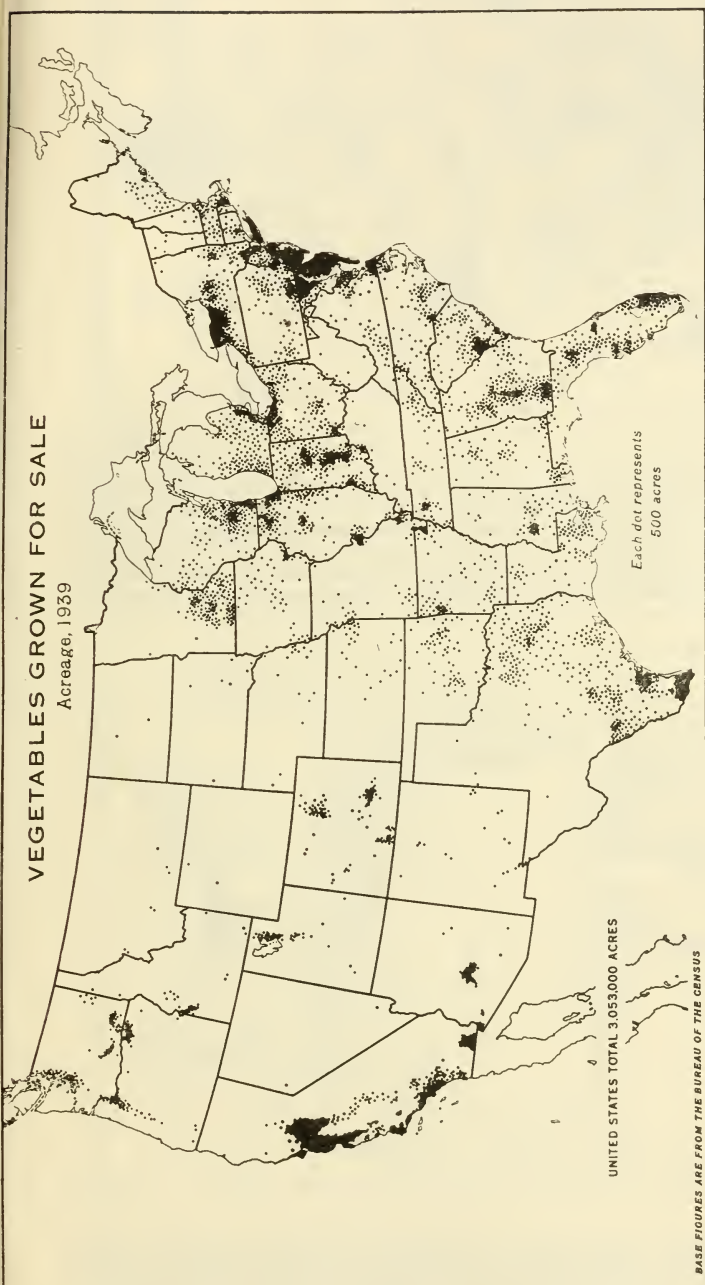
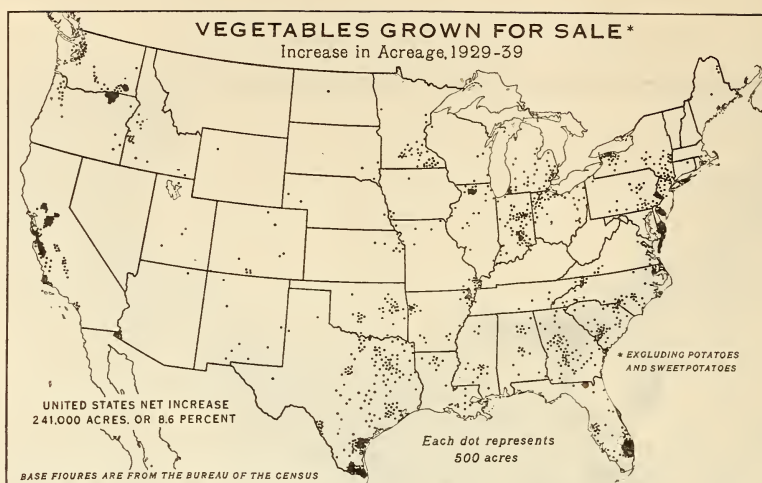


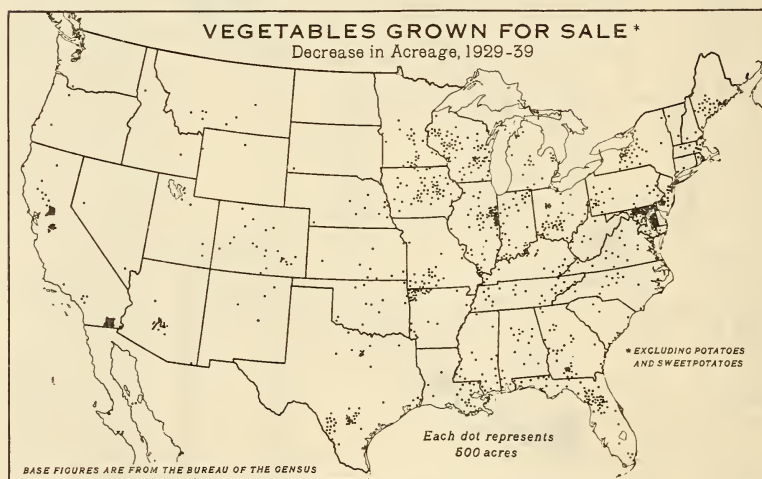
FIGURE 106.—The acreage of vegetables grown for sale increased more than 8 percent from 1929 to 1939. In 1939 the acreage of the four largest vegetable crops was about one-half of the total acreage of vegetables grown for sale. Tomatoes led with about 17 percent; corn (sweet), 13 percent; watermelons and green peas were about 10 percent each. The largest area of production extends from Norfolk, Va. to Long Island, N. Y. A rather large area extends from Utica, N. Y., west through Buffalo, Erie, and on to Toledo, Ohio, then northeast to Lake St. Clair, Mich. Another belt surrounds the southern half of Lake Michigan. Important districts are around large cities and in the irrigated fertile valleys of the West. Winter vegetables are grown in the Sacramento-San Joaquin and Los Angeles districts and the Imperial Valley of California, in North and South Carolina, and in the Gulf Coast States.

BAE 39979



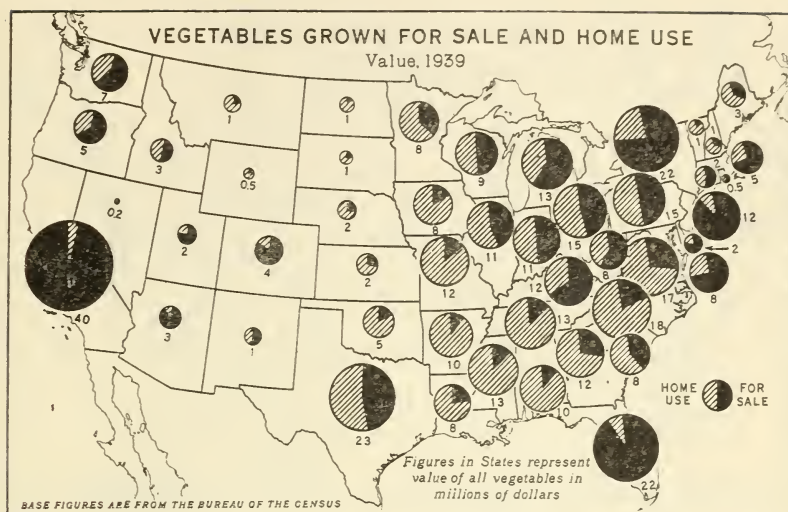
BAE 42029

FIGURE 107.—Vegetables grown for sale increased 8.6 percent from 1929 to 1939. This increase was due to better marketing facilities and a greater demand for more vegetables in the daily diet, as well as an increase in the population. Increases were heavy in the southern winter vegetable areas, in the valleys and irrigated areas of the Pacific Coast States, and in the well-established vegetable areas adjacent to the large cities in the North. Fresh vegetables are available in all important sections of the United States throughout the year.



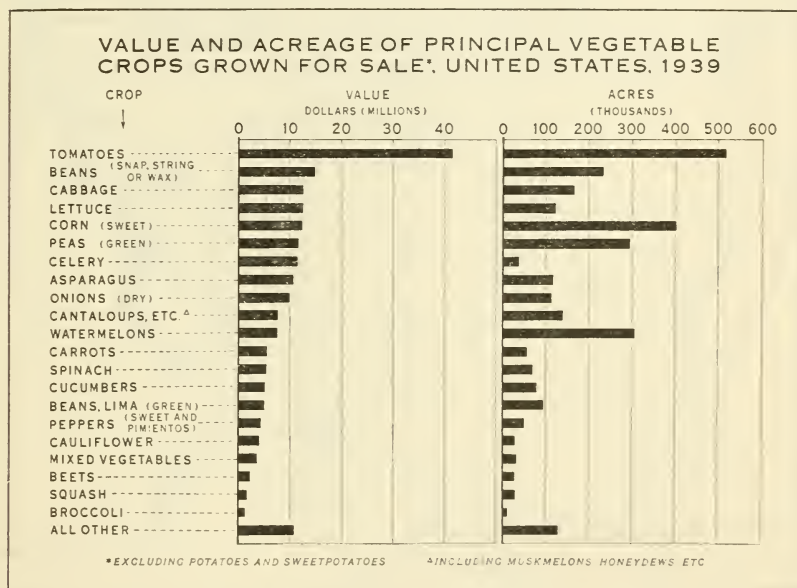
BAE 42030

FIGURE 108.—The decrease in acreage of commercial vegetables from 1929 to 1939 was widely scattered. Heavy decreases occurred in general where city areas expanded into rural vegetable areas, and in Maryland, eastern Illinois, north central Florida, the Ozarks, and in a few irrigated areas in the West. The small decreases elsewhere were distributed rather evenly through the entire commercial vegetable areas.



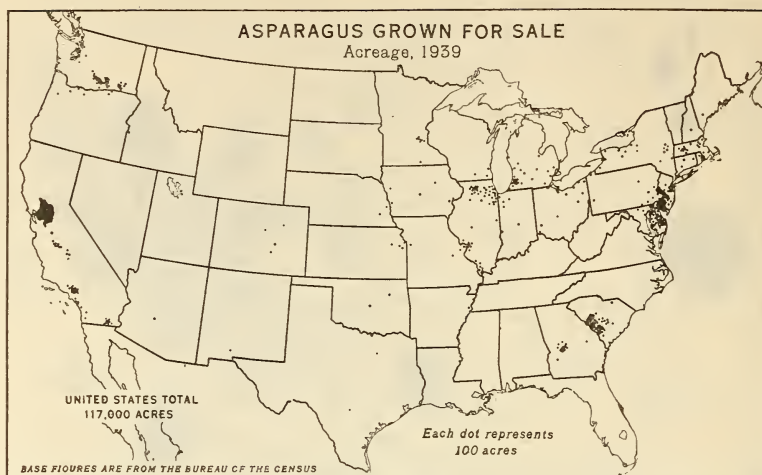
BAE 42074

FIGURE 109.—The total value of vegetables grown for sale and home use in 1939 was \$410,916,000, of which 48.6 percent was for vegetables grown for sale. California, Florida, New Jersey, and New York had values of vegetables grown for sale amounting to over 75 percent of the total value. The eastern Cotton Belt States, with the exception of Texas, Florida, and the West North Central States grow practically three-fourths of their vegetables for home use. California had the largest value of vegetables grown for sale, whereas North Carolina had the largest value of vegetables grown for home use.



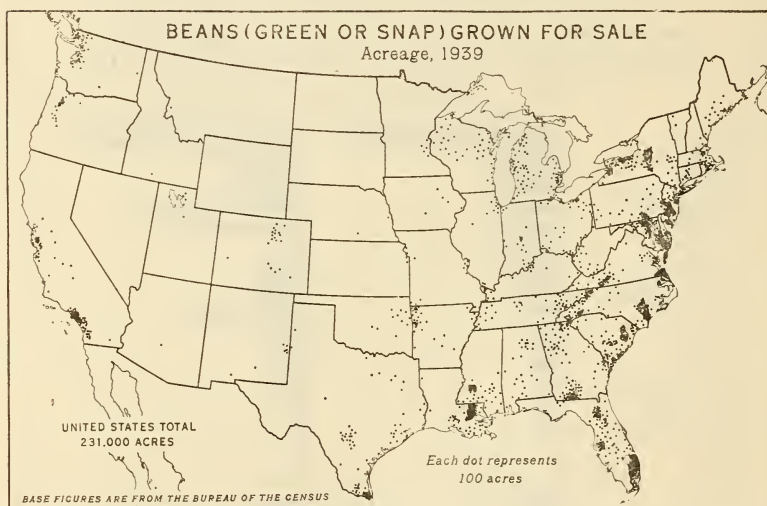
BAE 39988

FIGURE 110.—The value and acreage of tomatoes in 1939 was more than double that of any other vegetable (excluding potatoes and sweetpotatoes). The value of beans (snap, string, and wax) in 1939 was second in importance but the acreage was exceeded by sweet corn, green peas, and watermelons. Cabbage, lettuce, and sweet corn crops were each valued at about 12 million dollars, but the acreage of corn was much greater than the total of the other two crops. The total value of vegetables harvested for sale in 1939 was only about two-thirds of the 1929 value, whereas the acreage was about 10 percent more.



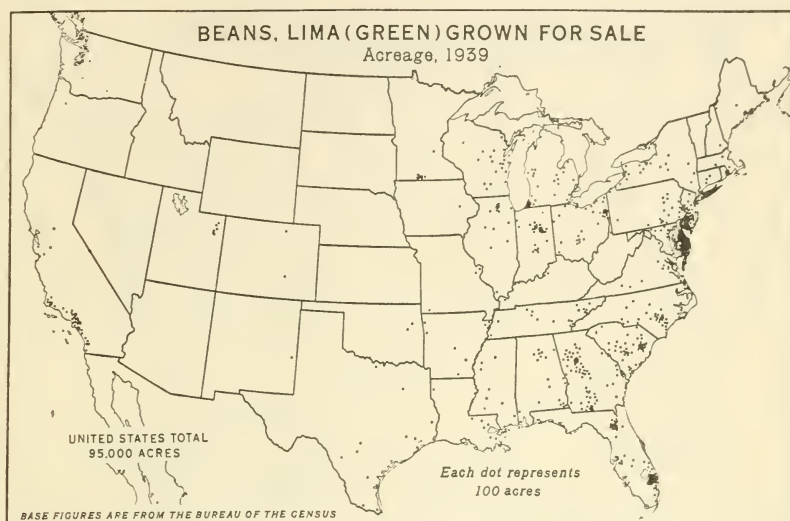
BAE 35982

FIGURE 111.—The acreage of asparagus grown for sale increased about 17,500 acres, or 17.6 percent, from 1929 to 1939. California produced over half of the Nation's commercial crop, and about 11,600 acres of the increase in acreage occurred in muck and peat lands of the Sacramento and San Joaquin delta in California. Southern Oregon had an increase of over 3,000 acres, and smaller increases occurred in many other old established areas.



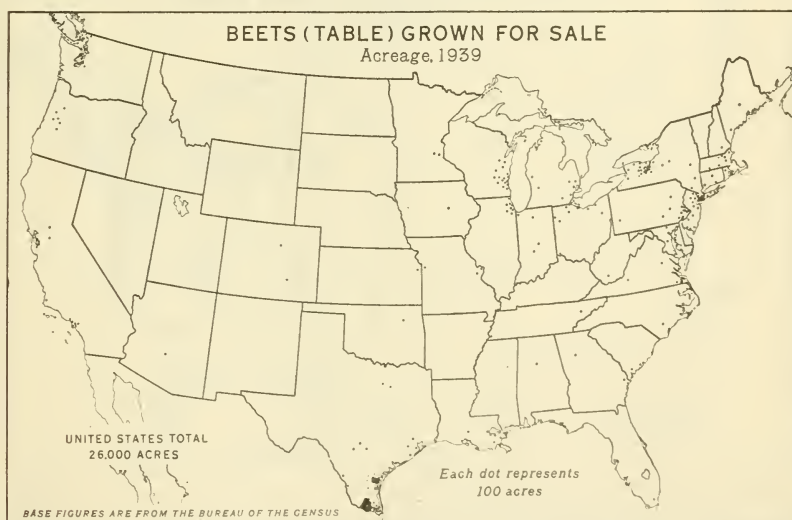
BAE 39997

FIGURE 112.—Green or snap beans for commercial market are produced in 20 States; twice as many States produce them for manufacturing purposes. The value of the green or snap-bean crop in 1939 was about 15 million dollars which was second only to the value of the commercial tomato crop. Florida ranks first in acreage of beans, with 65,000 acres; and Virginia second, with 14,200 acres.



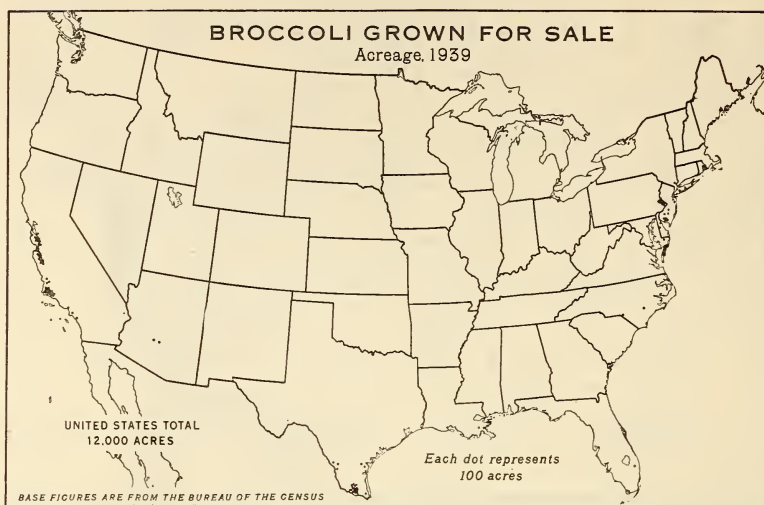
BAE 39999

FIGURE 113.—Lima beans cannot be grown as far north as common beans. Over half the acreage of lima beans (green) grown for sale is in the South Atlantic States. In 1939 the acreage of limas was nearly 300 percent greater than that in 1929. Pole limas, colored or white seed, are grown in the South in home gardens and to some extent for marketing under the name of "butter beans." Limas grow especially well on the dry lands of southern California. The three leading States in acreage of lima beans in 1939 were Delaware, with 12,800 acres; New Jersey, 12,600 acres; and Virginia, 7,500 acres. More than 5,000 acres of the total Virginia acreage were in Northampton County.



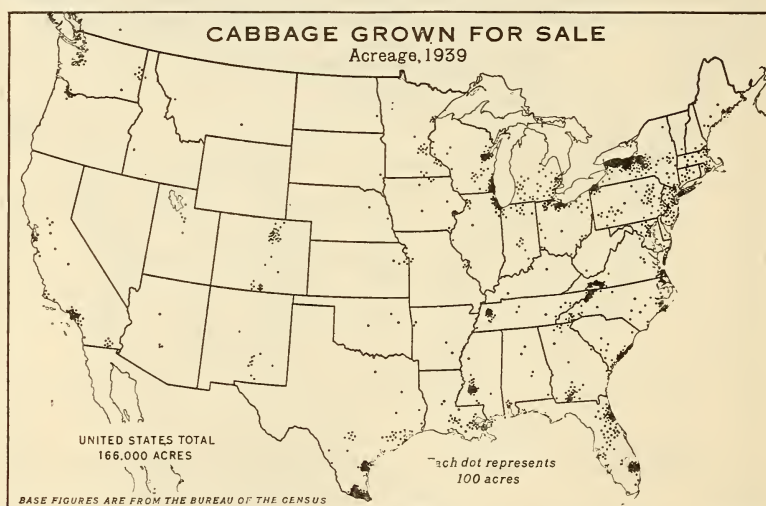
BAE 42000

FIGURE 114.—The acreage of table beets grown for sale in 1939 was 137 percent greater than in 1929. Leading producing areas are in the extreme southern tip of Texas, or the Brownsville area, the truck-crop areas around Philadelphia and New York, the Finger Lake region of New York, and eastern Wisconsin. Texas was the leading State with about 7,500 acres, and New York was second with about 4,000 acres.



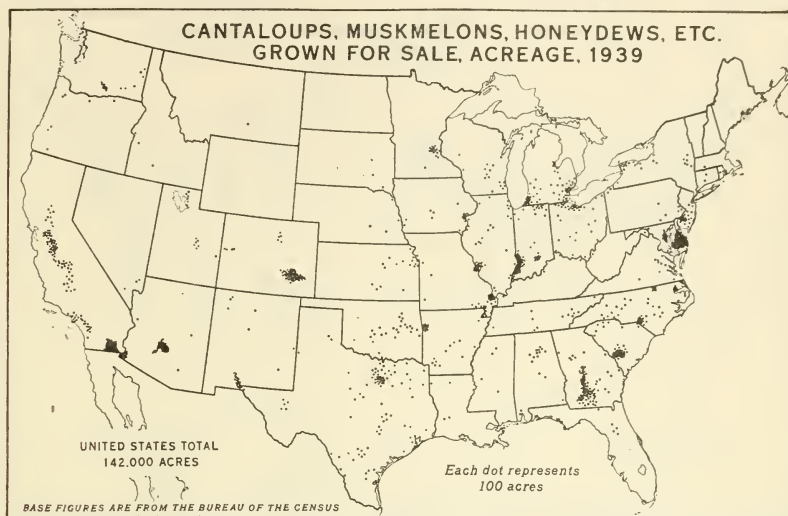
BAE 39998

FIGURE 115.—The main areas of broccoli are in California, from San Francisco to Los Angeles; the southern tip of Texas; the Delmarva peninsula; Bucks County, Pa.; New Jersey; and Long Island. Broccoli requires a cool, humid climate and areas of production are located either at a high latitude, a high altitude, or adjacent to large bodies of water. Broccoli requires from 6 to 10 months to reach the heading stage. In 1929, the acreage of broccoli was 1,600 acres and by 1939 had increased to 12,300 acres thus indicating its increase in popularity.



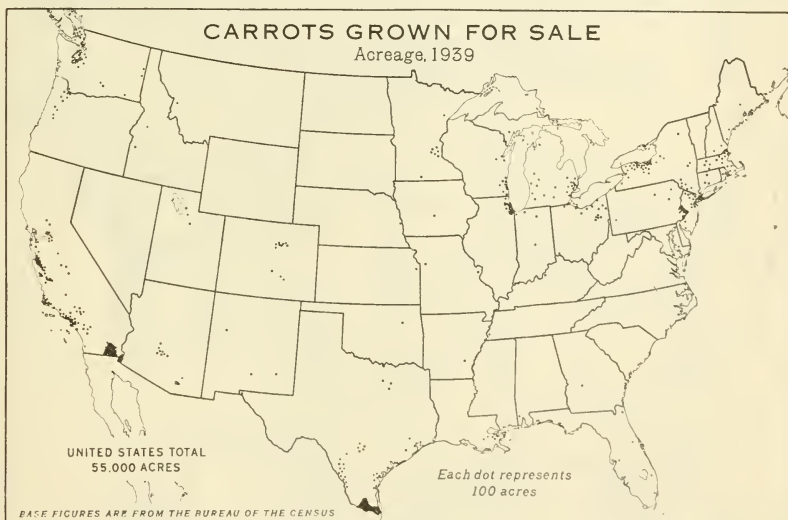
BAE 42031

FIGURE 116.—The cabbage crop is divided into three classes—early, intermediate, and late. Early cabbages are grown mostly in Florida; the Charleston district of South Carolina; Copiah County, Miss.; southern Georgia, Louisiana, Texas, and California. Some of the large intermediate areas are New Jersey, Long Island, Maryland, southwest Virginia, western Tennessee, and North Carolina. The largest late-cabbage districts are in Pennsylvania, western New York, Ohio, Michigan, and eastern Wisconsin where 35 percent of the Nation's acreage of cabbage is grown. The total acreage of cabbage in the United States was 7 percent less in 1939 than in 1929.



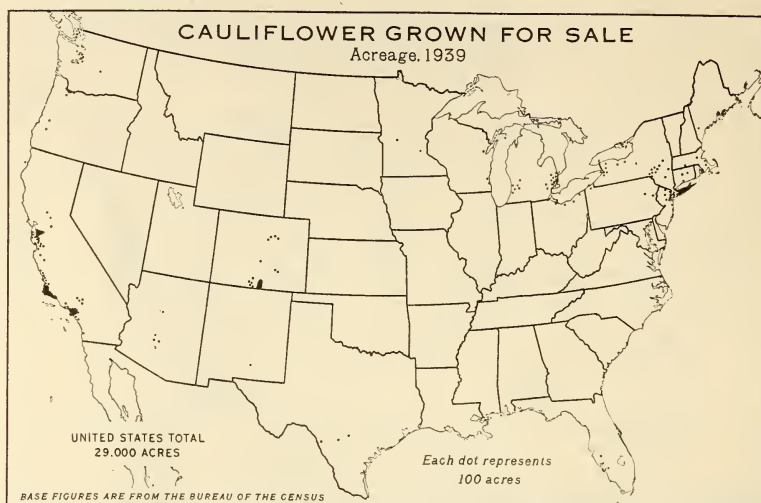
BAE 42032

FIGURE 117.—Cantaloups and other muskmelons are shipped from one-third of the States, and some additional States produce the crop in considerable quantities for market. The principal cantaloup-producing districts are in the West. California had the largest acreage, nearly 29,000 acres in 1939; it also leads with more than half of the total shipments. Colorado had the second largest acreage with 10,300 acres; and Texas third, with about 9,500 acres.



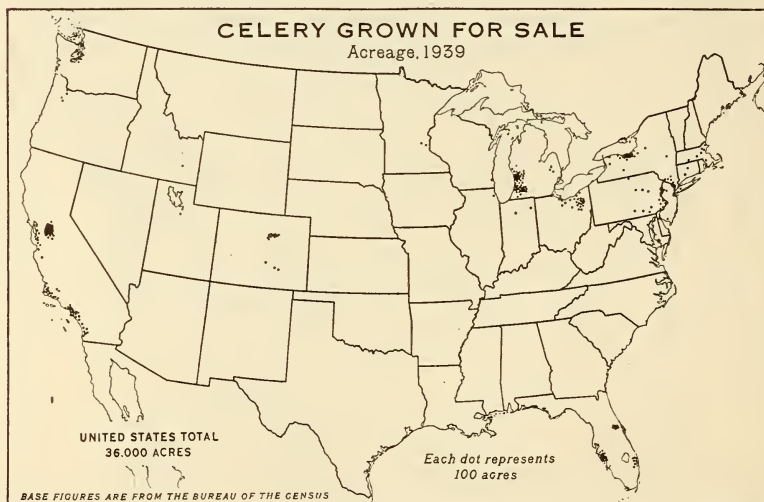
BAE 42033

FIGURE 118.—The use of carrots as a food has been stimulated greatly in recent years by the work of nutrition specialists. The acreage of carrots in 1939 was 159 percent greater than in 1929. Production of carrots is divided into two general classes—the northern or summer crop, and the southern or winter crop. In the North a late crop is planted for summer marketing or for winter storage. Yields are usually about 400 bushels per acre. In the South and on the Pacific coast an extensive winter crop is grown for shipment and sale in the form of bunched carrots. This crop usually yields about 270 bushels an acre.



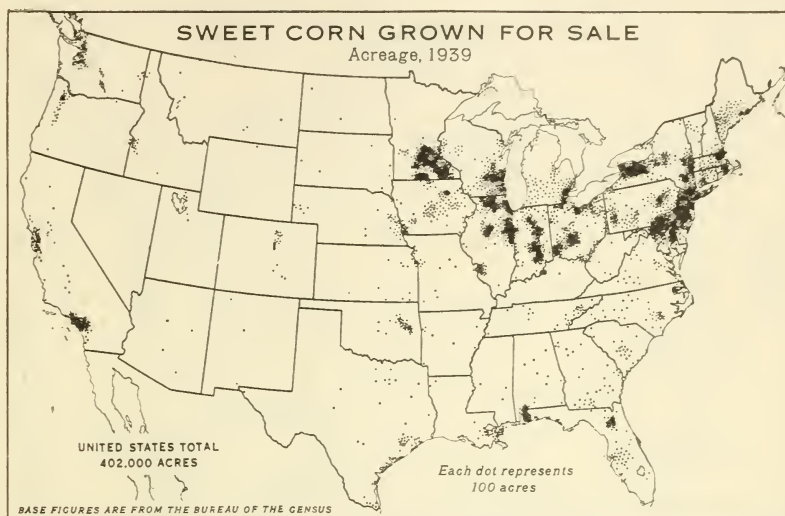
BAE 42034

FIGURE 119.—The acreage of cauliflower grown for sale increased by more than 8,500 acres from 1929 to 1939. Cauliflower grows in moist soils if these soils are well drained and fertile and if they are located in regions where the atmosphere is humid and cool. Cauliflower reaches the heading stage in 100 to 150 days. Carlot shipments are made monthly from the various producing areas.



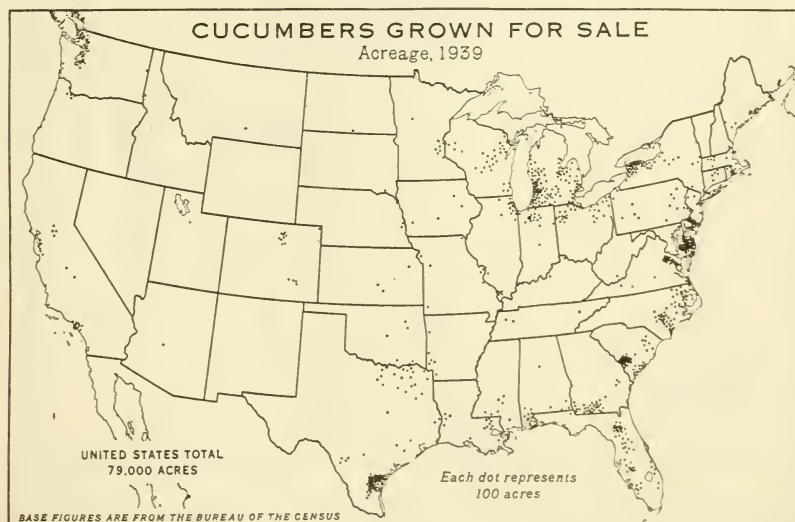
BAE 42035

FIGURE 120.—Acreage of celery produced for commercial purposes in the United States is confined mainly to the northeastern and Great Lakes area and to certain districts in Florida, California, and Colorado. Ideal conditions for the production of celery are abundant moisture in a well-drained soil, and a relatively cool growing season with cool nights, and days having plenty of bright sunshine. Commercial production is limited to regions where rainfall is abundant or where provision may be made for subirrigation or sprinkler or furrow irrigation.



BAE 42036

FIGURE 121.—The acreage of sweet corn grown for sale in the United States is located chiefly in the States east of 97° longitude and north of 37° latitude, where more than 80 percent of the crop is produced. Most of the corn grown in this area is canned, although considerable quantities are sold fresh in nearby markets. In California and in special localities in the South and West it is sold fresh in the nearby city markets. Production of sweet corn is limited to areas having a minimum frost-free season of 85 to 120 days, warm spring months, and an average rainfall of 40 inches properly distributed throughout the year.



BAE 42037

FIGURE 122.—Almost 65 percent of the cucumbers grown for sale are used for pickles. Cucumbers grown in Colorado, Michigan, Wisconsin, Indiana, Ohio, Virginia, and Maryland are used chiefly for pickles. Texas, California, North Carolina, and New York have a high acreage of cucumbers for fresh use and for pickles. The cucumbers grown in Alabama, South Carolina, New Jersey, and Delaware are sold chiefly for fresh use.



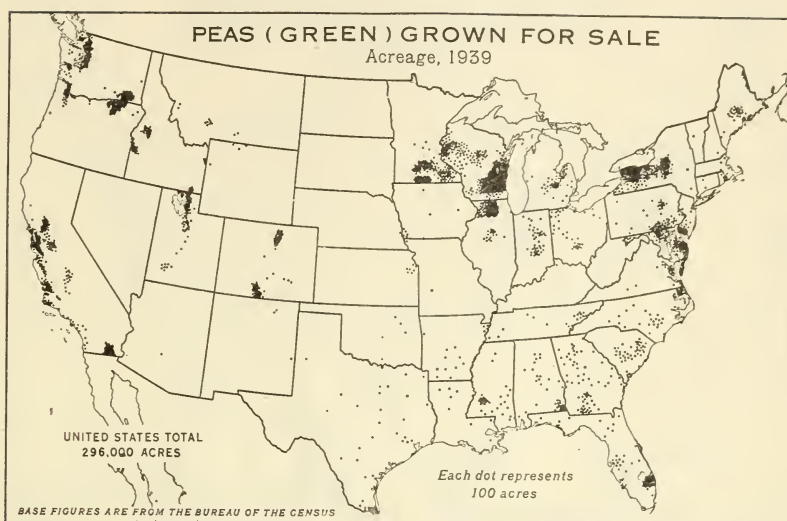
BAE 42038

FIGURE 123.—Lettuce is the most important salad plant, and one of the principal vegetable crops. In 1939, almost two-thirds of the commercial crop of lettuce was grown in California, chiefly in the Salinas-Watsonville area along the southern coast, and in the Imperial Valley. About one-half of the remainder was produced in irrigated districts of Arizona. Areas of importance are located in Washington, Colorado, New York, and New Jersey.



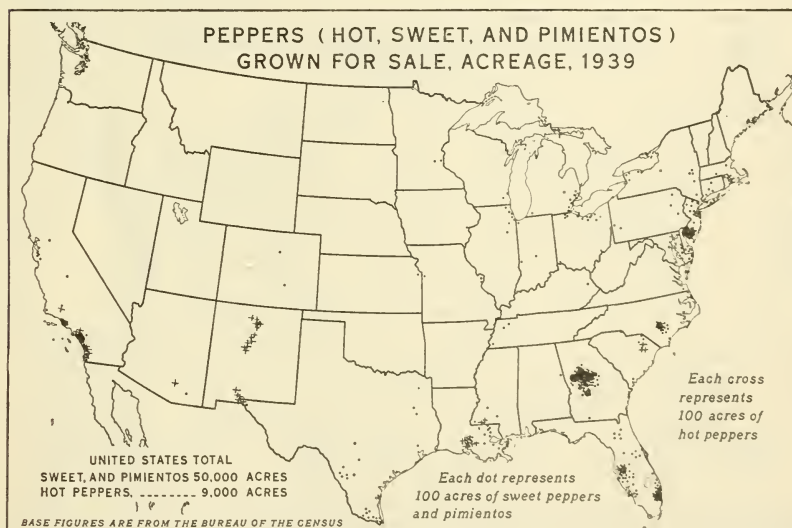
BAE 42070

FIGURE 124.—The onions ranks high as a food and for food-flavoring purposes. Dry onions grown for sale are divided into three classes—early, intermediate, and late. The average relative importance of the production of onions by classes is: Early, 40 percent; intermediate, 15 percent; and the late or main crop, about 45 percent. The early crop of onions is harvested in April, May, and June and is produced in Texas, California, and Louisiana where the Bermuda onion is chiefly grown. The intermediate crop comes from northern Texas, New Jersey, California, Oklahoma, and Washington, and is harvested in June and July. The late crop is grown in the remaining States, especially California, Iowa, and Utah. This crop is harvested in August and stored for use from September until April.



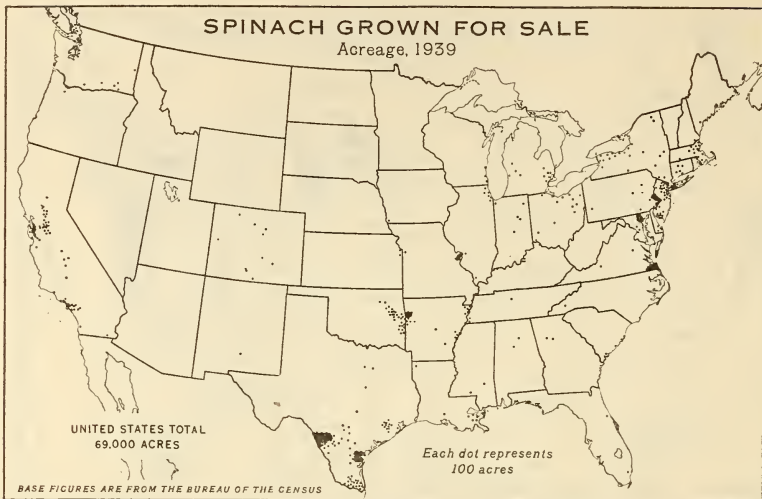
BAE 42071

FIGURE 125.—More than 60 percent of the green peas produced are used for canning. They are grown chiefly in Wisconsin, New York, Washington, Minnesota, Maryland, Illinois, Utah, Oregon, and Michigan. California produces early, intermediate, and late crops of peas, and markets more than two-thirds of the market-garden peas grown in the United States. Colorado, New York, Washington, Utah, New Jersey, Idaho, and areas in the Southern States furnish most of the remaining fresh peas for marketing. Peas do not thrive in warm weather; in the South they are grown in winter and spring.



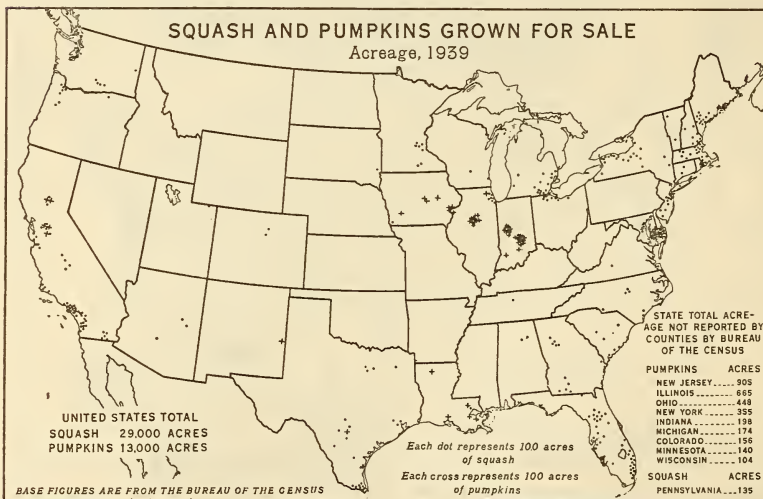
BAE 42072

FIGURE 126.—Peppers harvested for sale are composed mainly of two commercial types—the sweet or mild-flavored which are chiefly large-fruited, and the hot varieties which are usually small. The pimiento variety of sweet peppers is used extensively for processing and in 1939 over 23,000 tons were processed. Hot peppers are prepared and sold in various forms, such as tabasco catsup, tabasco sauce, pepper sauce, paprika, and cayenne, and in "chili powder" which is used in preparing chili con carne.



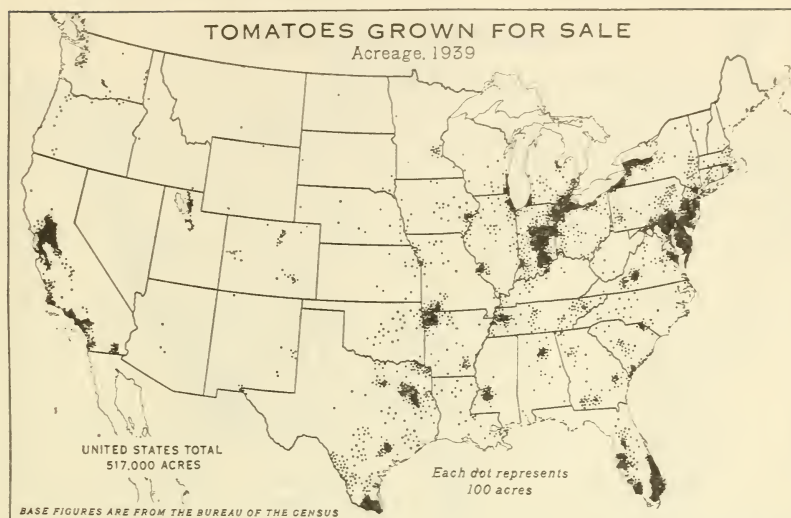
BAE 42046

FIGURE 127.—Spinach is the leading crop grown for greens in the United States. It is grown in almost all the States except those of the northern Great Plains. In 1939, about three-fourths of the spinach crop was marketed fresh. California ranks first in the production of spinach for canning, and Texas second; Maryland, Oklahoma, and Arkansas also produce spinach for canning.



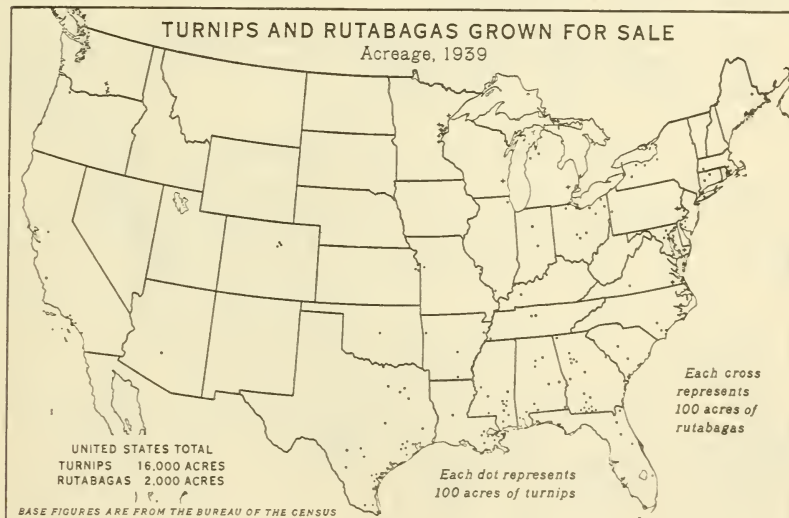
BAE 42047

FIGURE 128.—Squash and pumpkins are grown for home consumption in all localities in the United States. In addition to their use as fresh vegetables, a large tonnage of squash and pumpkin is canned and used mostly for making pies. The principal pumpkin-producing States are Indiana, Illinois, New Jersey, Maryland Iowa and California.



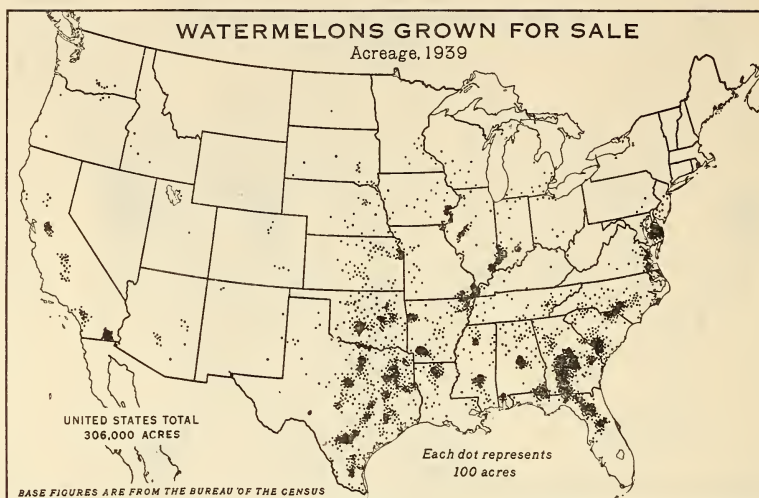
BAE 42048

FIGURE 129.—In 1939 the acreage of tomatoes grown for sale constituted about 17 percent of all vegetables grown for sale and the crop was valued at 42 million dollars. Fresh or table tomatoes are shipped in carlots from more than 20 States but the bulk of the early truck movement comes from Florida, California, Texas, Mississippi, South Carolina, and Georgia. Less than 40 percent of the tomato acreage was devoted to fresh or table tomatoes. Tomatoes grown and sold for processing, as canned tomatoes, catsup and sauces, and paste and juice, used over 60 percent of the total tomato acreage, and were grown in three-fourths of the States.



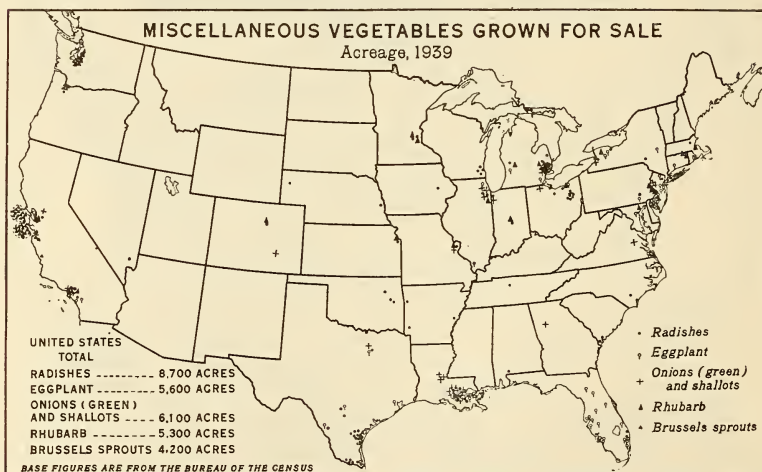
BAE 42097

FIGURE 130.—Turnips are a cool-climate crop and mature in 60 to 80 days. In the North a fall crop is grown for winter storage and stock feeding, whereas in the South, turnips are grown as a late-fall, winter, or early-spring vegetable crop. The variety "Seven Top" is grown in the South for use as greens which are used like kale and spinach. Rutabagas require a longer time to mature than do turnips but they also require a cool climate. Ordinarily, only one crop a year is possible in the North, where it is planted in spring and harvested in the fall.



BAE 42073

FIGURE 131.—Watermelons are grown for home use and for local markets in three-fourths of the States. Their culture for shipping is confined to the Southern States and to California. The early crop comes from Florida and the Imperial Valley of California. The second early crop is grown in areas in South Carolina, North Carolina, Georgia, the Gulf States, and Arizona, and constitutes nearly three-fifths of the total watermelon acreage. The rest of the production, or the late crop, comes from the remaining States. The three States having the largest acreage in 1939 were Texas, with 62,700 acres; Georgia, with 48,700; and South Carolina, with 22,000 acres.



BAE 42096

FIGURE 132.—The total acreage of the five miscellaneous vegetables grown for sale in 1939 as shown on the map above, amounted to about 30,000 acres, whereas in 1929 the same crops were grown on only 17,000 acres. From 1929 to 1939 the commercial production area of radishes increased from 3,300 to 8,700 acres, that of eggplant from 2,600 to 5,600 acres, green onions from 5,000 to 6,100 acres, rhubarb from 3,900 to 5,300 acres, and brussels sprouts 1,800 to 4,200 acres.

FRUITS AND NUTS

Land in fruit orchards, vineyards, and planted nut trees in 1939 was 5,045,000 acres, and the acreage of small fruits was 322,000 acres.

The number of fruit trees of all ages, as well as those of bearing age reported by farmers in 1939 was much smaller than the number reported in 1929, yet total production was greater. The decline in fruit-tree numbers, chiefly on general farms with small orchards and in low-producing orchard areas, was more than offset by increased bearing capacity in the more productive commercial areas.

Per capita consumption of 18 fruits and berries increased from an average of 170 pounds a year for the period 1910-14 to an average of 200 pounds a year for the period 1935-39. Average annual per capita consumption of apples for 1910-14 was 67 pounds; for 1935-39 it was only 42 pounds, whereas consumption of citrus fruits per capita increased from 19 pounds per year to 50 pounds between the same periods. Canned fruits increased from 4 pounds per capita consumption to 14 pounds, dried fruits from 4 to 6 pounds a year, and juices (grape, grapefruit, lemon, orange, pineapple, combination orange and grapefruit, and prune juice, and miscellaneous fruit nectars and juices) from 0.3 pounds to 4.3 pounds between the periods, 1910-14 and 1935-39.

TABLE 3.—*Nuts: Production and imports, United States, 1919, 1929, and 1939*

Crop	Production			Imports		
	1919	1929	1939	1919	1929	1939
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
Walnuts, Persian (English).....	29,920	39,710	64,227	34,470	24,073	5,437
Pecans.....	15,904	13,075	36,419			
Almonds.....	7,926	4,702	23,855	47,554	33,258	2,292
Filberts and hazelnuts.....		206	3,109	12,568	7,877	3,492
Tung nuts.....		60	1,161	(1)	(1)	(1)

¹ Tung oil imported: 39,801 tons in 1919, 65,471 tons in 1929, 49,785 tons in 1939.

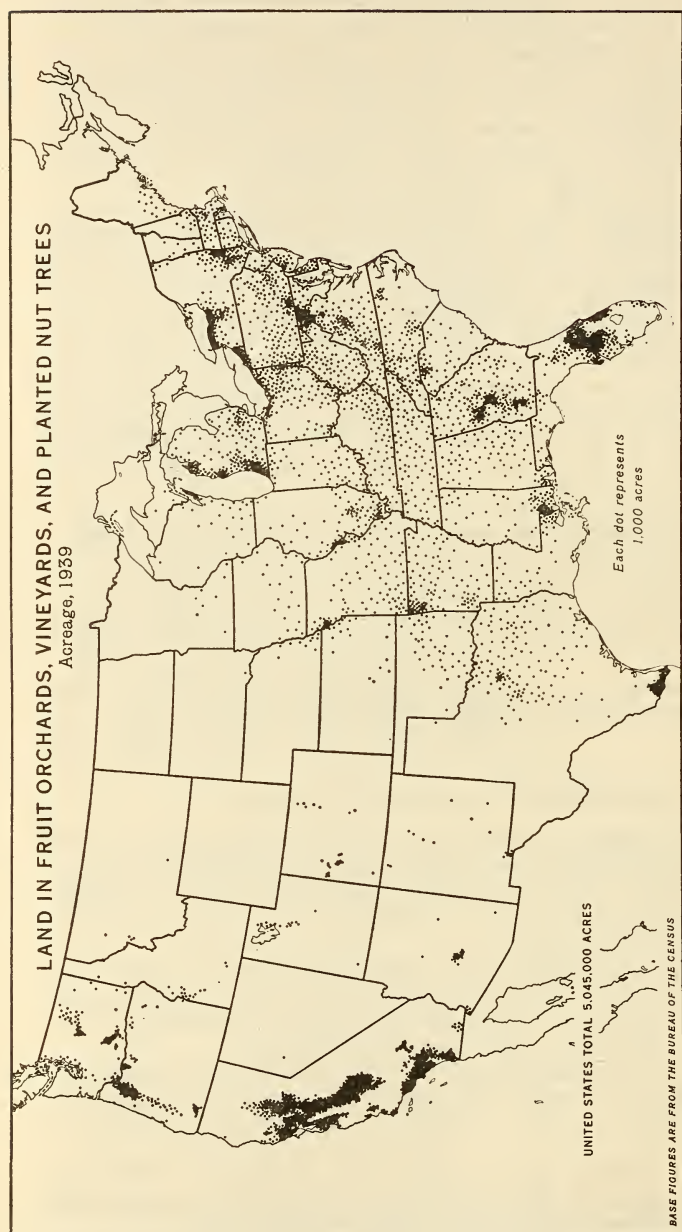
The annual per capita consumption of oranges increased about 150 percent from 1920 to 1940, lemons 165 percent, grapefruit 200 percent, cherries 450 percent, grapes 33 percent, and pears about 50 percent. Peaches, and plums and prunes remained about the same except for slight year-to-year fluctuations.

The production of walnuts more than doubled between 1919 and 1929, and the imports of walnuts fell from 34,470 tons in 1919 to 5,437 tons in 1939. In 1939 the United States exported 4,347 tons of walnuts, making net imports in that year 1,090 tons.

The production of pecans in 1939 was more than double the production in 1919. The production of almonds increased from 7,926 tons in 1919 to 23,855 tons in 1939. Imports dropped from 47,554 tons to 2,292 tons.

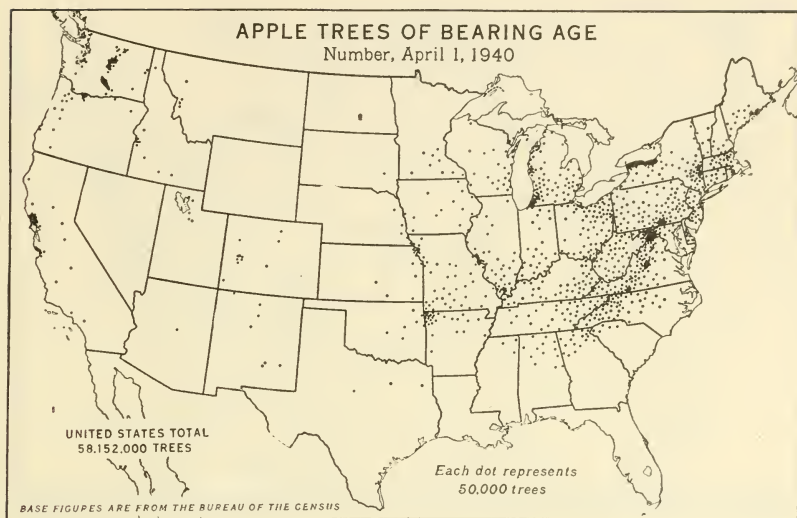
Practically no filberts and hazelnuts were produced in 1919 but 12,568 tons were imported during that year. By 1939 the production had risen to 3,109 tons, and imports were only 3,492 tons.

Tung nuts have been produced in the United States only recently. Oil from the crushed nuts is used in paints and varnishes. In 1939 Florida was the leading State with about 556 tons; Mississippi produced 422 tons; and Louisiana 152 tons.



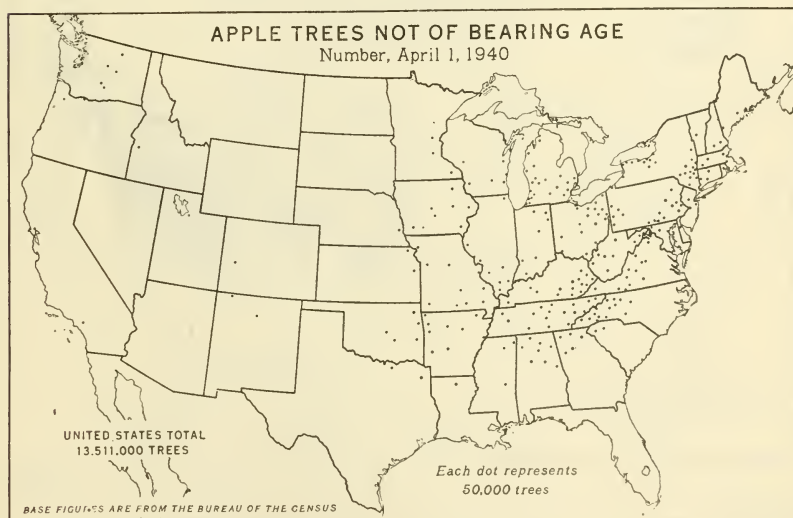
BAE 42145

FIGURE 133.—In 1939 acreage of fruits and improved nuts in the United States was over a million acres less than in 1929. The major decrease in acreage occurred in apple orchards, although acreages of grapes, pears, and peaches declined somewhat. The increases were mainly in tung and other nuts and citrus fruits. California had the largest acreage and contributed more than one-fourth of the total in 1939. All varieties of tree fruits and nuts are produced in the valleys, irrigated districts, foothills, and cool coastal areas of California. Florida has about one-fifth as many acres as California, mostly devoted to citrus fruit. Michigan has large acreages of apples, grapes, and peaches adjacent to Lake Michigan. The climatic influence of the lake contributes much to the success of these areas. Georgia is noted for its peaches and its improved varieties of pecans. There are large acreages of various kinds of apples in the Appalachian Mountain and Piedmont regions of the Eastern States, in the lake region of New York, in the Ozarks, and in irrigated districts of the Pacific northwest.



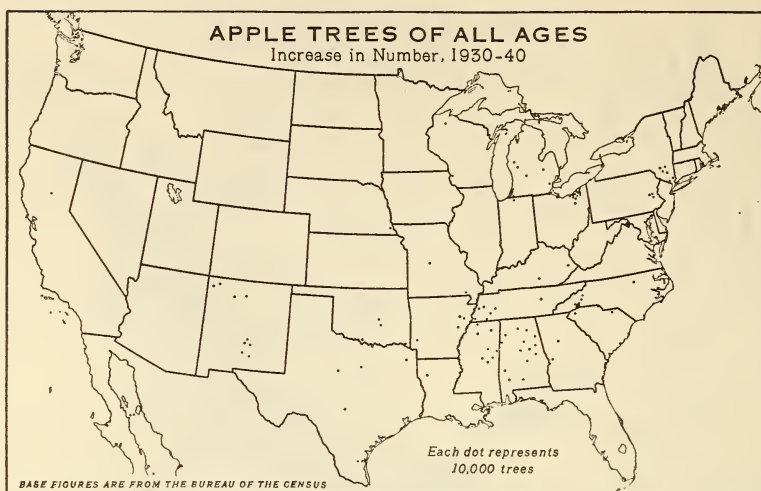
BAE 42197

FIGURE 134.—Apple trees of bearing age are mostly concentrated in the foothills and valleys of the Eastern States. In 1940 New York was the leading State, with nearly 5,400,000 trees. Some well-known varieties, such as Esopus, Spitzenberg, Northern Spy, Wagener, Courtland, Yellow Newton, and Jonathan, originated in New York State. Other large numbers of trees are located on the leeward shores of the Great Lakes and in the irrigated valleys of the West.



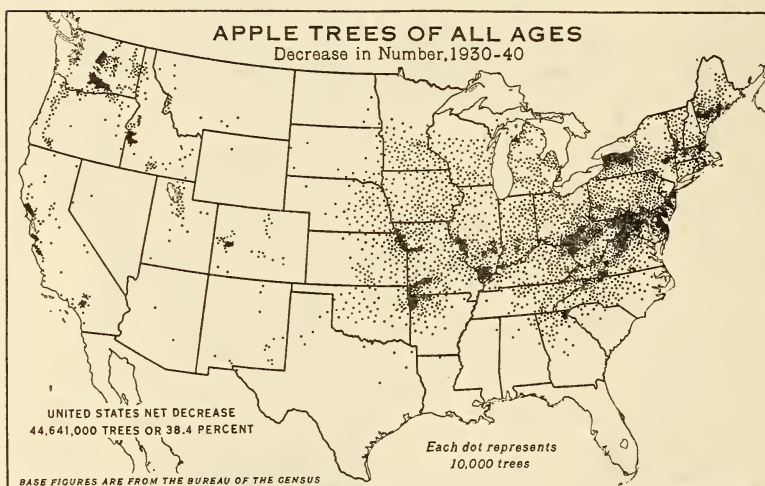
BAE 42198

FIGURE 135.—Apple trees not of bearing age April 1, 1940, were less than 20 percent of the total apple trees of all ages. In the East, recent planting of trees coincides with the present areas of production, whereas very few recent plantings have been made in the West. Less than half as many young apple trees were in orchards in 1940 as were reported in 1930.



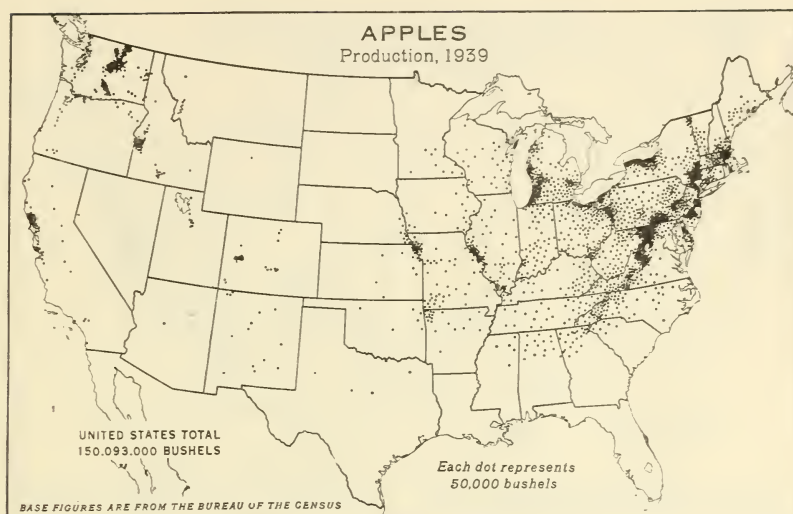
BAE 42005

FIGURE 136.—Local increases in total number of apple trees between 1930 and 1940 were small, and scattered thinly through most of the South. A few areas of heavy increase were in the North; one centered around Cleveland, Ohio, another was in Berrien County, Mich., and a third just north of New York City.



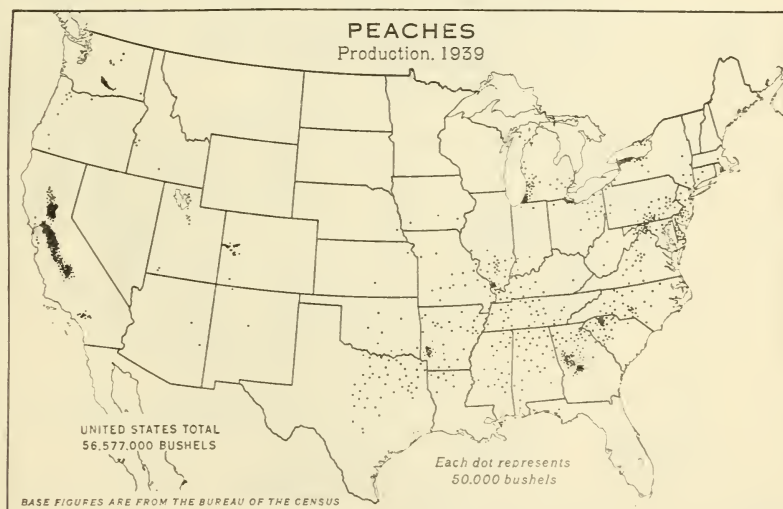
BAE 42001

FIGURE 137.—On April 1, 1940, there were over 39 percent fewer apple trees of all ages than on April 1, 1930. Heavy declines in number of trees occurred in southern Maine, western New York, New Jersey, Delaware, the northern Appalachian area, southern Illinois, the Ozark district of Arkansas and Missouri, and in the apple districts of Washington, Idaho, Oregon, and California. Older trees were killed by weather conditions and many unproductive trees were cut but were not replaced with young trees.



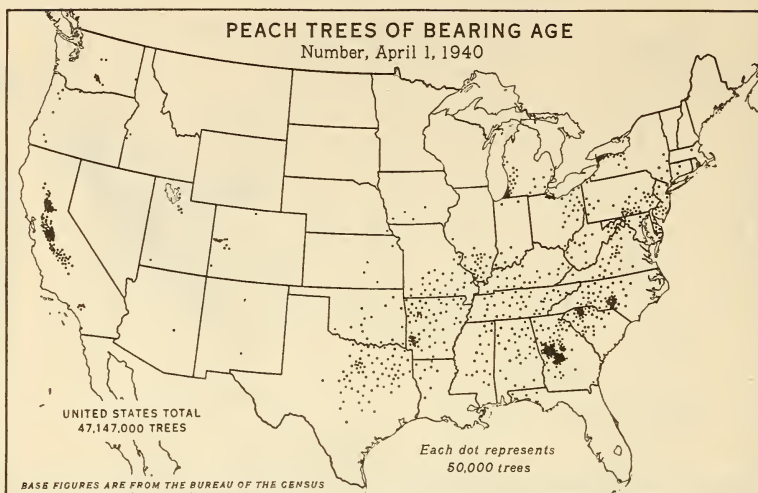
BAE 42112

FIGURE 138.—The number of apple trees of bearing age in 1939 was 35 percent less than in 1929, whereas production was 18 percent higher than in the low-production year 1929. Heavy planting in recent years of younger trees, partly to replace older trees and partly in new orchards, contributed toward the larger production in 1939. The South Atlantic States had the largest number of bearing trees but ranked third in production, with nearly 26,000,000 bushels; whereas the Middle Atlantic States ranked third in the number of bearing trees, and first in production, with over 35,500,000 bushels.



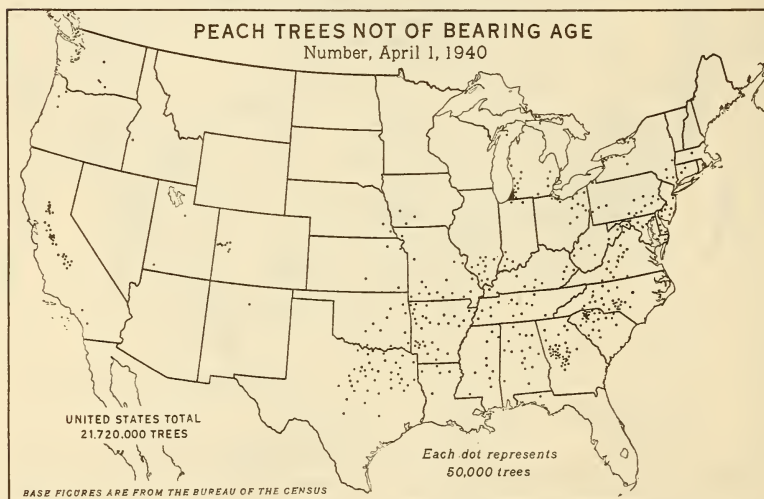
BAE 42113

FIGURE 139.—Production of peaches in 1939 was about 33 percent greater than in 1929 which was the second lowest year in the 1929-39 Census decade. The 1939 peach production was exceeded only by that of 1931. California is the leading peach-producing State, with over 20 million bushels, more than 60 percent of which were clingstone peaches used for canning. Georgia is second with nearly 4½ million bushels. The three leading States, California, Georgia, and Michigan, produced one-half of the total crop.



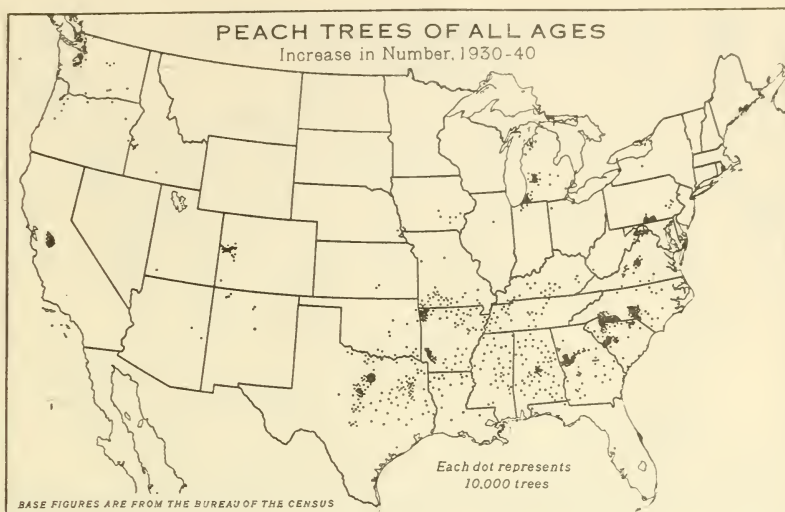
BAE 42199

FIGURE 140.—On April 1, 1940, there were 20 percent fewer peach trees of bearing age than in 1930. In 1939 the South Atlantic States had almost one-third of the peach trees of bearing age. Georgia alone in this group of States had over 6,671,000 bearing peach trees, a small margin over those in California. California and Florida had almost 30 percent of the early peach-producing trees of bearing age.



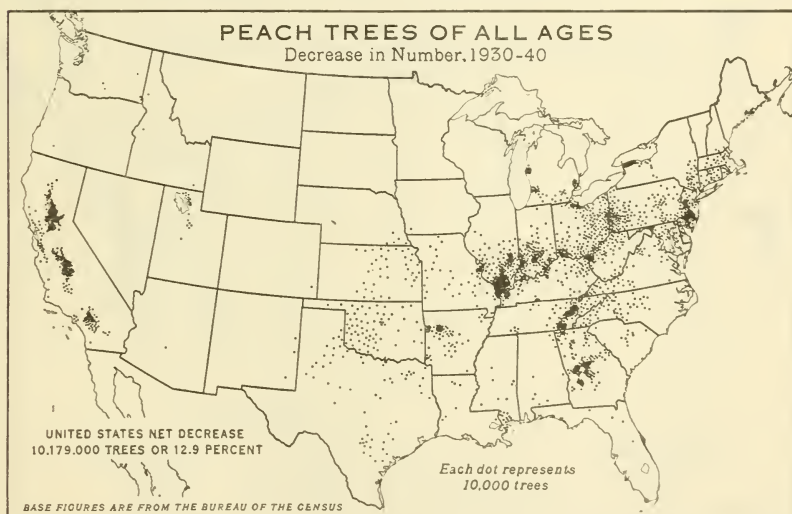
BAE 42200

FIGURE 141.—On April 1, 1940, peach trees not of bearing age totaled nearly half as many as those of bearing age. There were over 1,500,000 more nonbearing peach trees in 1940 than in 1930, whereas the nonbearing apple trees were only half as many for 1940 as for 1930. Nonbearing peach trees in 1940 were distributed evenly throughout the peach-producing areas.



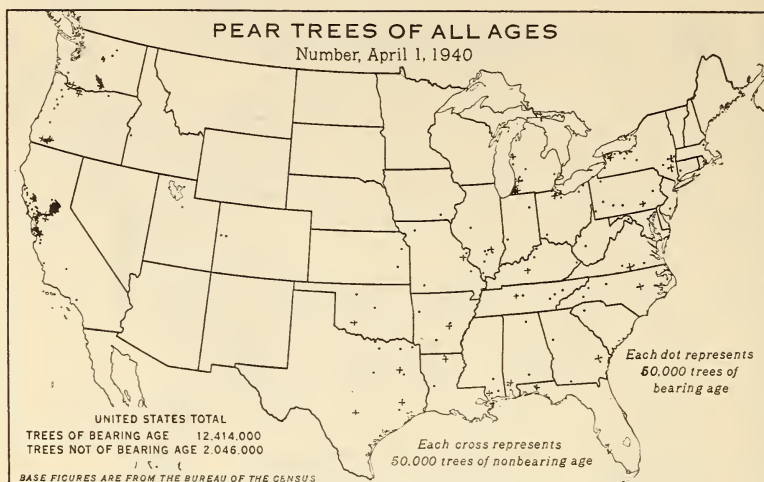
BAE 42006

FIGURE 142.—The heaviest increase in the number of peach trees of all ages between 1930 and 1940 occurred in the South Atlantic States; trees increased materially in western South Carolina; in north central Georgia; in south central North Carolina; and in central Virginia. Increases also occurred in many other States, but were heavy in Parker County, Tex.; the Ozark region, and Howard County, Ark.; Berrien and Kent Counties, Mich.; Mesa County, Colo.; and San Joaquin and Stanislaus Counties, Calif.



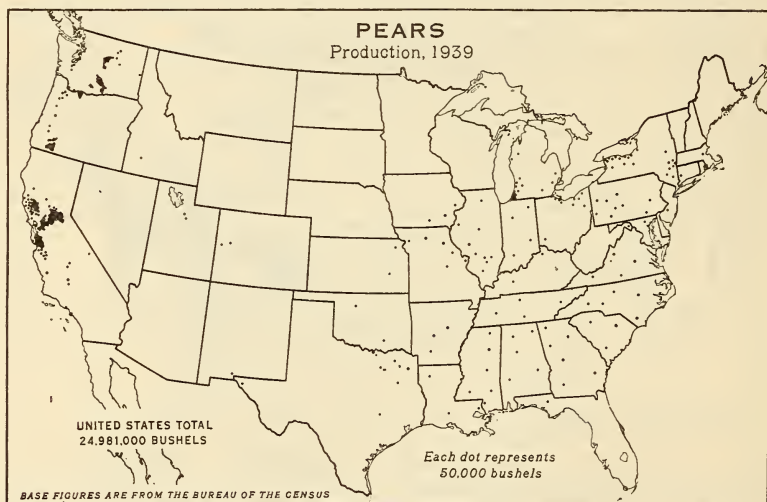
BAE 42007

FIGURE 143.—Between 1930 and 1940 the peach industry suffered a net decrease of nearly 13 percent in tree numbers, after a 9-percent net decrease in the previous census decade, 1920-30. Freezing weather killed many old trees and a declining seasonal average price per bushel received by farmers discouraged replantings. The heaviest decrease in any State between 1930 and 1940 occurred in the canning peach district of California, the largest peach-producing State with the heaviest decrease. The decrease in the east North Central States was also heavy and southern Illinois and eastern Ohio contributed considerably to this decrease.



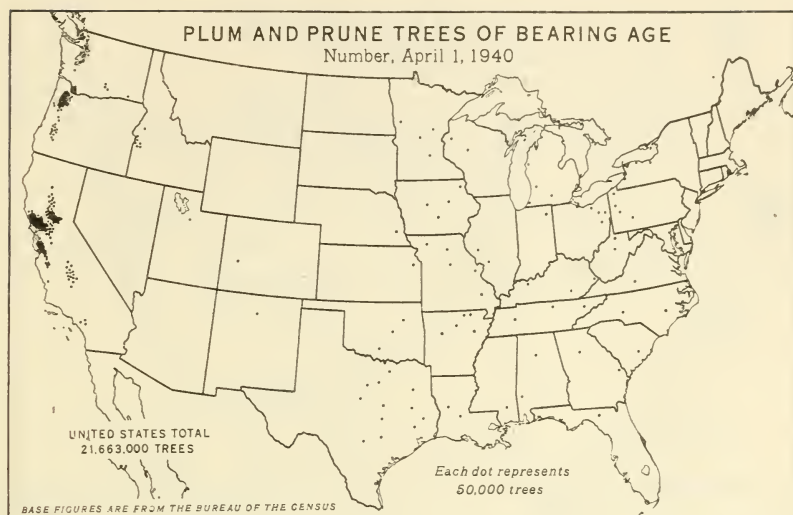
BAE 42276

FIGURE 144.—The number of pear trees of all ages in the United States has decreased 32 percent since 1929. The pear trees of bearing age decreased 33 percent, and those not of bearing age decreased 61 percent. The principal pear-producing areas are in central California, the Rogue River Valley of Oregon, the Yakima Valley of Washington; Berrien, Cass, Van Buren, and Allegan Counties in Michigan; the Ontario lake shore, and Hudson Valley, New York.



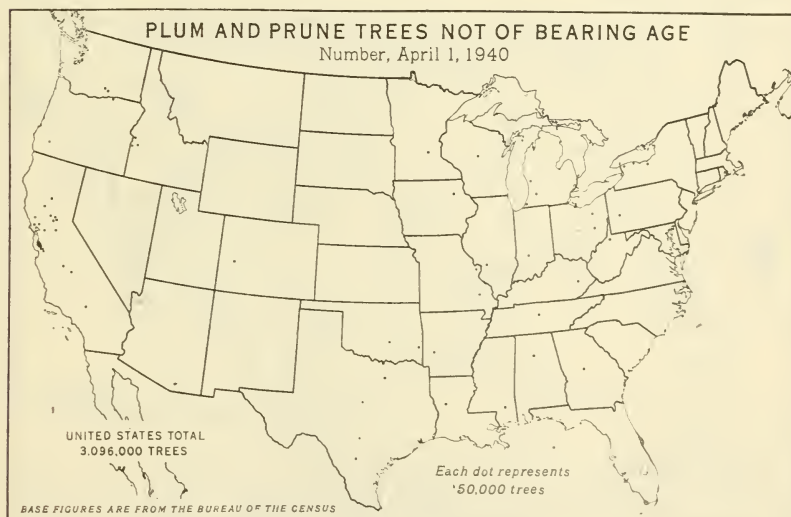
BAE 42114

FIGURE 145.—The 1939 pear crop was only 35 percent greater than the 1929 crop and over 70 percent of it was grown in the Pacific Coast States. California is the largest producing State, with 8,557,000 bushels; Washington is second with 5,531,000; and Oregon third, with 3,542,000 in bushels. In these States, pears are produced mostly under irrigation, and the quality of the fruit is high. The two principal eastern producing States are New York and Michigan, each having slightly over a million bushels.



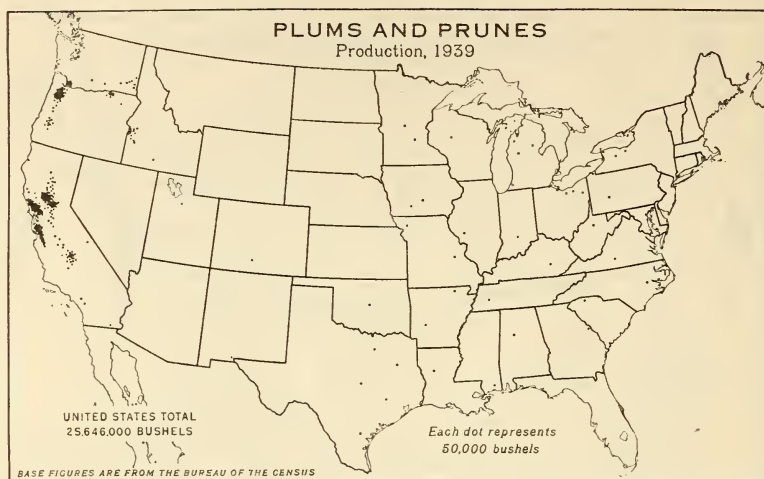
BAE 42201

FIGURE 146.—The number of bearing plum and prune trees in 1940 was 26 percent less than in 1930. Over 80 percent of these trees are in the Pacific Coast States. California has 12,915,000 trees, the largest number in any State; Oregon is second, with 3,580,000; and Washington third, with about 900,000 trees. Practically all production from these States are prunes, dried for the market. In the Eastern States the trees are plum trees and the fruit is consumed fresh or canned.



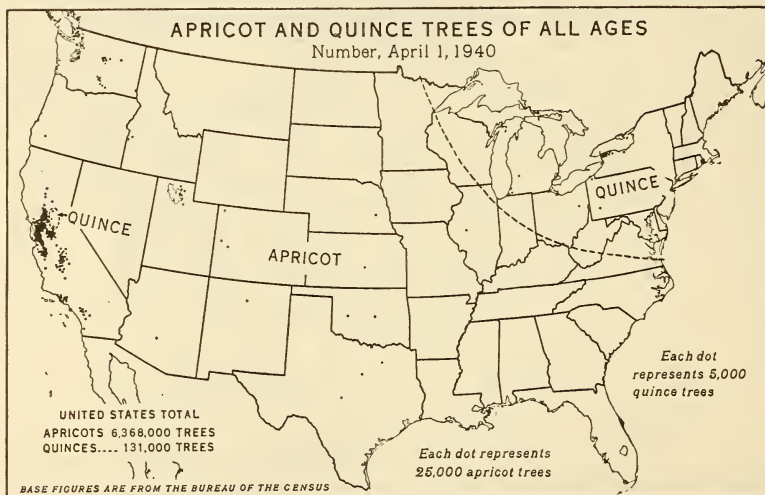
BAE 42202

FIGURE 147.—The number of plum and prune trees not of bearing age in 1940 was only 75 percent of the number in 1930. California had 1,192,000 trees or more than one-third of the national total. Almost half of these were in Santa Clara County, a heavy prune-producing area. The young plum trees in other parts of the country were mostly noncommercial and the numbers were small. Texas had 266,000 trees; Michigan, 137,000; and New York, 134,000 trees.



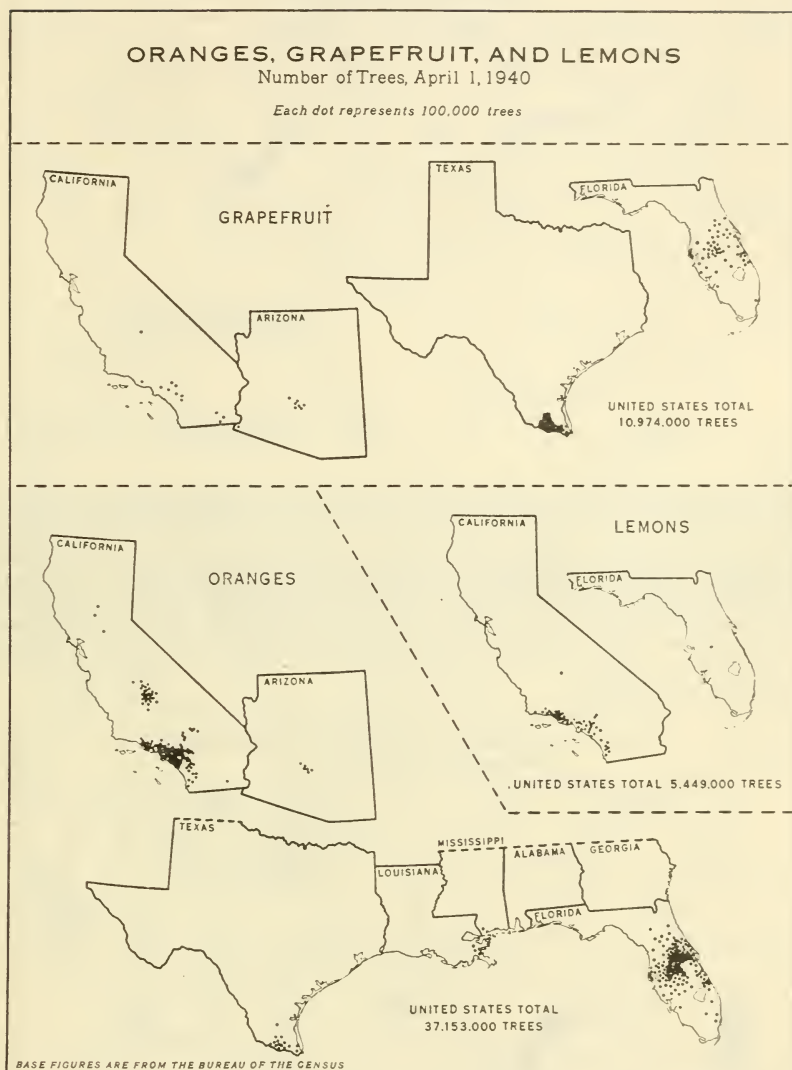
BAE 42231

FIGURE 148.—There were about 74 percent as many plum and prune trees in the United States in 1939 as there were in 1929, but the production of plums and prunes was nearly 28 percent greater than in 1929, a year of low production. California produced 18,833,000 bushels, or about 73 percent of total production in the United States. Oregon ranked second with 3,243,000 bushels, Washington third with 821,000 bushels, and Idaho fourth with 698,000 bushels. The remaining production of slightly over 2,000,000 bushels was chiefly plums and came from small farms in nearly all the Eastern States and a few of the midwestern States.



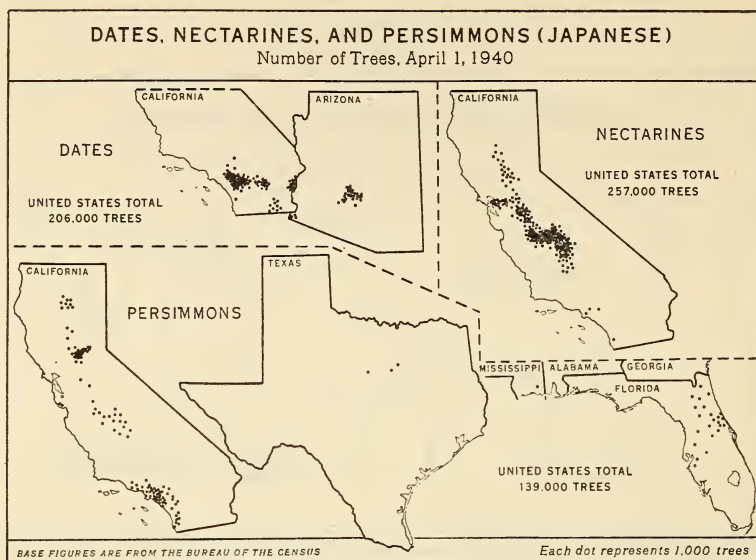
BAE 42115

FIGURE 149.—Over five-sixths of the apricot trees are in the fertile valleys of California, where the fruit is mostly dried. Other small areas of commercial production are in the warm, irrigated areas of the West. The quince trees grow in the region of the Great Lakes, where the climate is cooler, and in a small, cool area in California. New York produced nearly half the crop. Quinces are used for preserves, jelly, and fruit flavor rather than as fresh fruit.



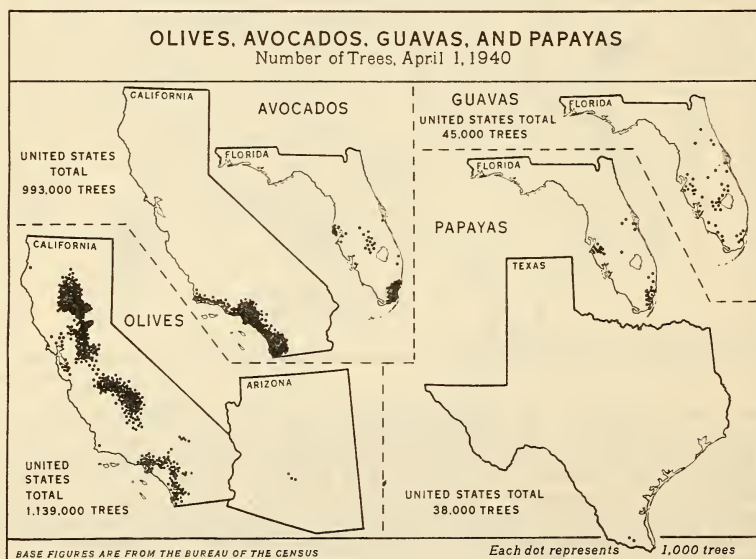
BAE 42222

FIGURE 150.—Practically all the citrus fruit is grown in California, Florida, Texas, and Arizona. In 1939, California produced about one-half of the oranges, Florida 43 percent, Texas about 4 percent, and Arizona, Louisiana, and Mississippi produced the remaining 3 percent. Florida produces nearly one-half of the grapefruit, Texas about one-third, and California slightly exceeds Arizona in the remaining production. California produces practically all the lemons except about 1 percent of the total, which is produced from about 70,000 trees in Florida.



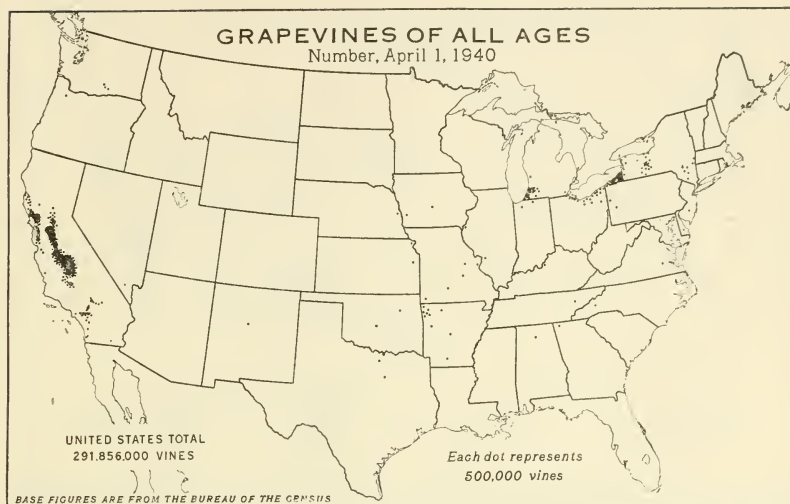
BAE 42221

FIGURE 151.—On April 1, 1940, about 86 percent of the date trees were in California and nearly 14 percent in Arizona. Texas, although it is not shown on this map, had about 900 trees, or less than one-half of 1 percent of the total number of trees. Practically all the nectarine trees are in California, but about 500 trees are in Texas. Over 80 percent of the persimmon trees are in California, about 17 percent in Florida, and about 2.5 percent in Texas. The remainder are in the Gulf Coast States.



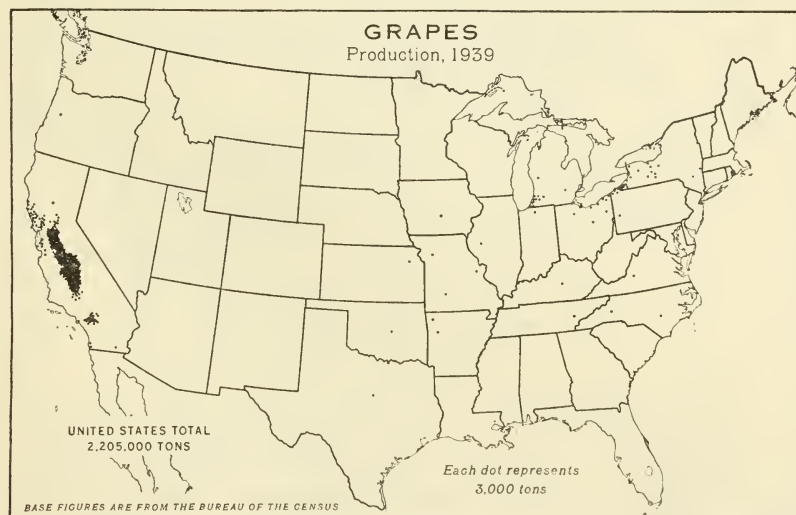
BAE 42220

FIGURE 152.—Practically all of the olive trees are in California, which produces 99.8 percent of all the olives. About 3,000 trees of bearing age are in Arizona. Approximately 86 percent of the avocado trees and 86 percent of production are in California. The remainder are in Florida. About 91 percent of the production of guavas comes from Florida, and the remainder from 1,000 trees located in California but not shown on this map. Over 93 percent of the total number of papaya trees are grown in Florida, and the remainder in Texas.



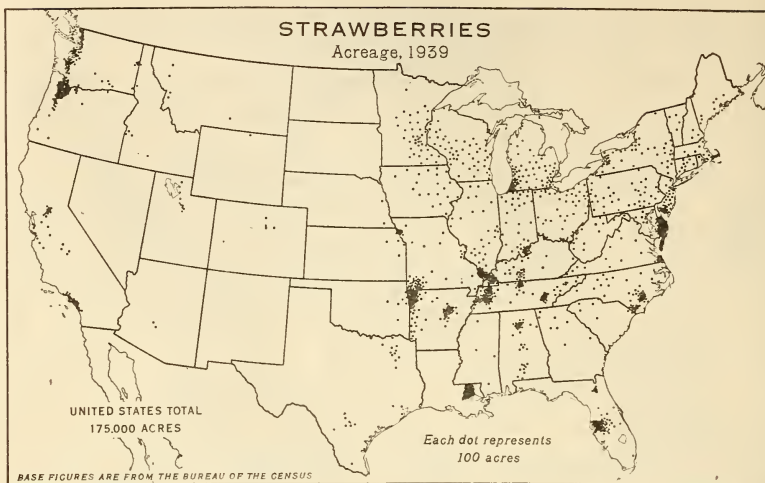
BAE 42232

FIGURE 153.—California has nearly 220 million grapevines or about 70 percent of the United States total. New York ranks second with about 25 million vines. Grapes from New York and other eastern areas are mainly consumed as fresh fruit or made into juice. In California, wine grapes come mainly from the San Francisco Bay area, grapes used for raisins are grown around Fresno, and table grapes come from vineyards in the Sacramento and San Joaquin valleys and from the southern part of the State.



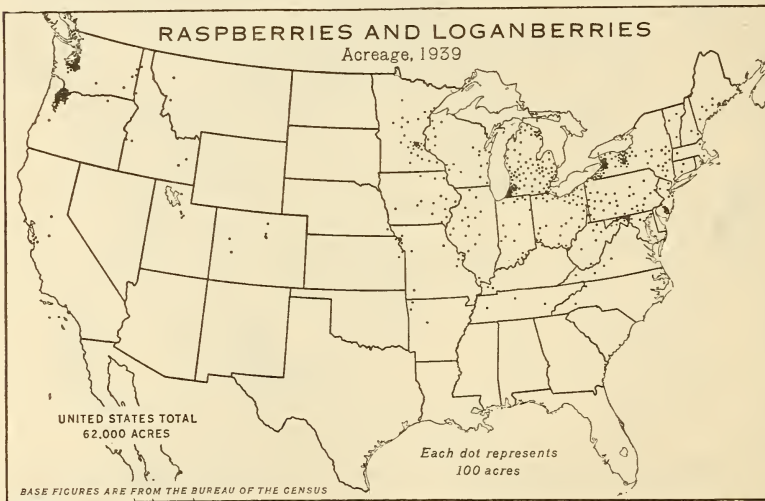
BAE 42116

FIGURE 154.—In 1939, over 90 percent of the production of grapes in the United States came from California. The harvested production of all varieties of grapes from California is utilized in different ways: 45 percent are dried, 32 percent are crushed by commercial wineries, 13 percent are used as table stock, 10 percent are used as juice stock, and about 0.5 percent are canned. New York and Michigan have the most important grape areas in the East, and the fruit is consumed fresh or made into juice.



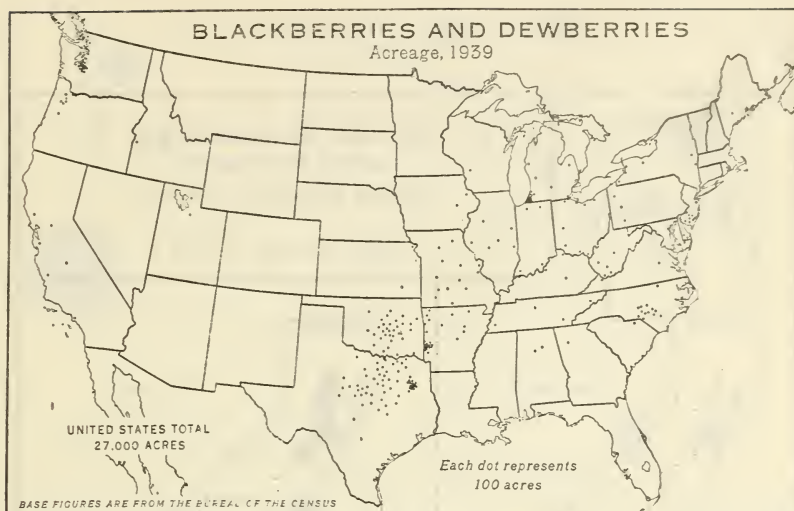
BAE 42147

FIGURE 155.—The production centers of early strawberries for commercial use are in the area near Tampa, Fla., where picking begins as early as December and in Tangipahoa and Livingston Parishes, La., where berries are picked from early in February to late in March. Important districts in eastern North Carolina, White County, Ark., Escambia County, Ala., and the Los Angeles and San Francisco Bay areas of California, ship strawberries from March 15 to April 30. The remaining areas, such as Norfolk-Eastern Shore district, Berrien County, Mich., and fertile and irrigated valleys in Western States, pick and ship strawberries during May and early June.



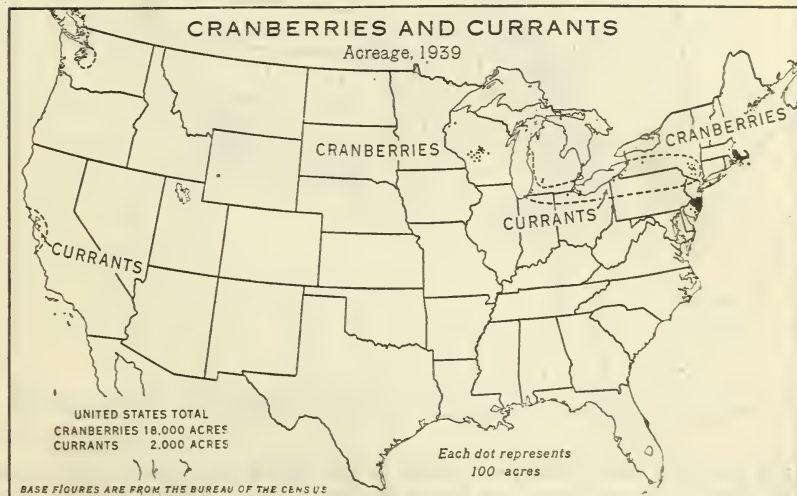
BAE 421-8

FIGURE 156.—More than half of the acreage of raspberries is found in four States, Michigan has 14,000 acres; New York, 8,400; Oregon, 4,800; and Washington, 3,700. The South has only a few acres of raspberries, and these only at high elevations where it is cool. Practically the entire loganberry crop is located in the Pacific Coast States, and over two-thirds of the acreage is in the Willamette Valley of Oregon. Large quantities of loganberries are canned or made into juice, whereas most of the raspberries in the Northeastern States are used as fresh fruits.



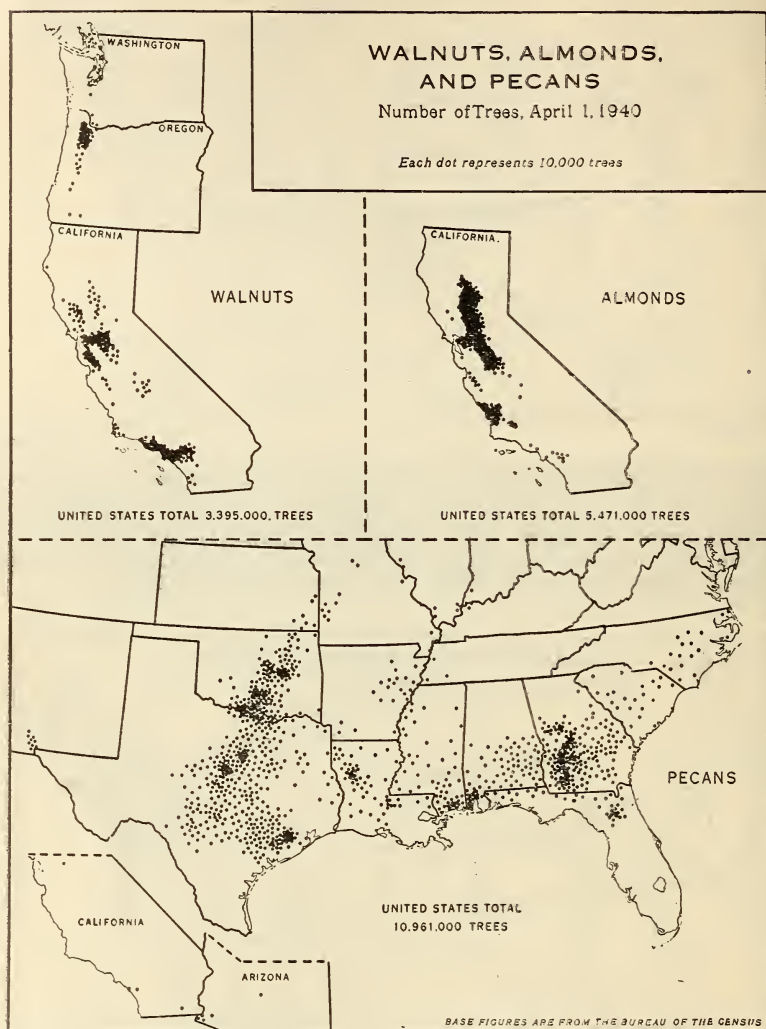
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FIGURE 157.—Blackberries grow in a warmer climate than raspberries. In 1939, three of the Southern States contained almost one-half of the acreage of blackberries. Texas led with 6,300 acres; Oklahoma was second with 3,200; and Arkansas third with 2,600. Small acreages of blackberries are scattered along a line from Arkansas to Maine. Dewberries are grown chiefly in Berrien County, Mich.; the Hudson Valley, N. Y.; and North Carolina.



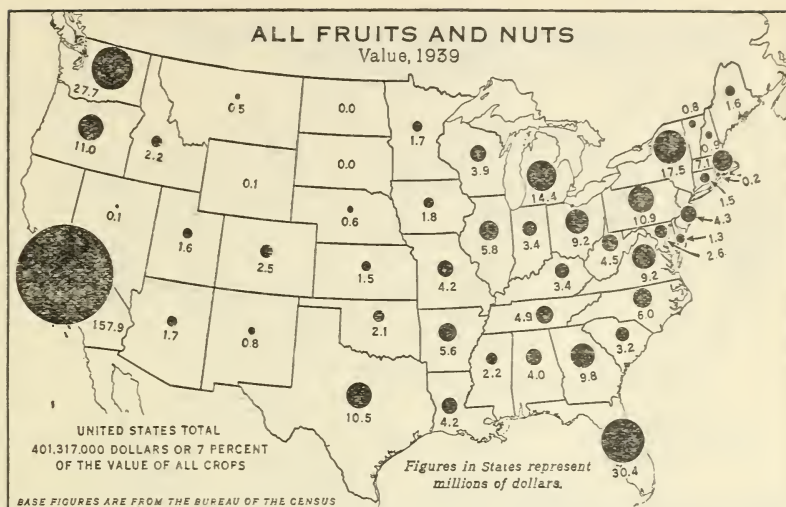
BAE 42150

FIGURE 158.—In 1939 the acreage of cranberries in the United States was 50 percent greater than in 1929; whereas the acreage of currants was 50 percent less in 1939. Cranberries and blueberries both require an acid soil. The important production areas of cranberries are the cranberry bogs in Massachusetts and New Jersey, and the muck and peat lands in central Wisconsin. A few thousand acres of currants are located in southeastern New York, on the leeward shores of the Great Lakes, and along the Pacific coast.



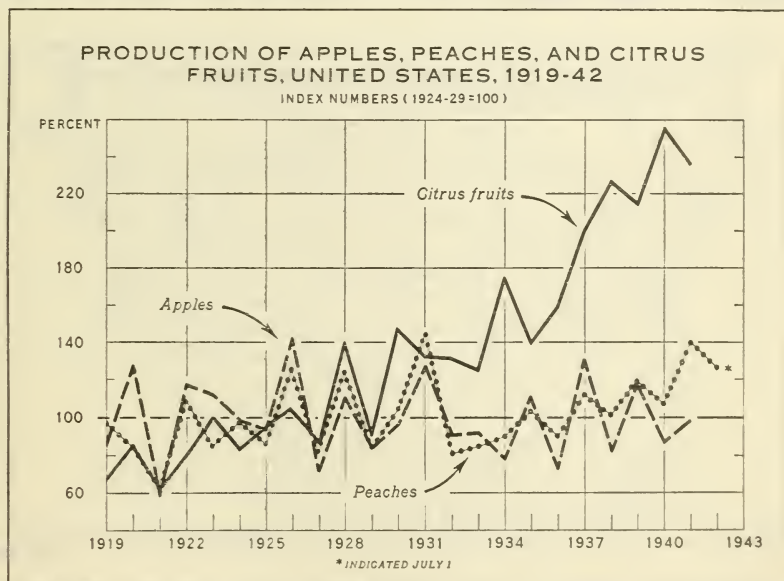
BAE 42049

FIGURE 159.—All the almond trees grown in the United States are in California. The Persian walnut trees are grown in the valley of central California, in the Willamette valley of western Oregon, and in Washington. Pecans are a product principally of the Cotton Belt States. The largest producing States (Texas, Georgia and Oklahoma) have over one-half the total acreage. Most of the pecans west of the Mississippi River are of native stock, whereas those east of the river are largely imported varieties.



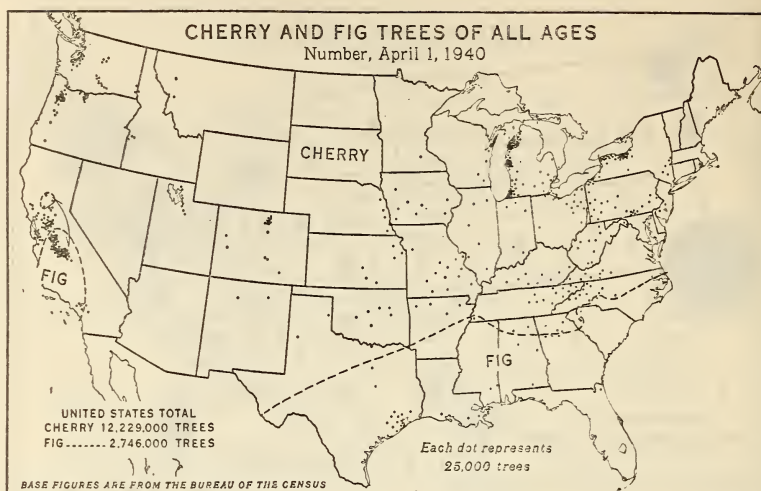
BAE 42278

FIGURE 160.—The farm value of the fruit and nut crops in 1939 was about 39 percent less than in 1929, but as a proportion of the value of all crops, it was smaller in 1939. Decreases in the total value occurred in 41 States in 1939 compared with 1929. Texas, Georgia, Alabama, Mississippi, South Carolina, Massachusetts, and Ohio had larger values for all fruits and nuts in 1939 than in 1929. California had the largest decrease in value, whereas Georgia had the largest increase during this period.



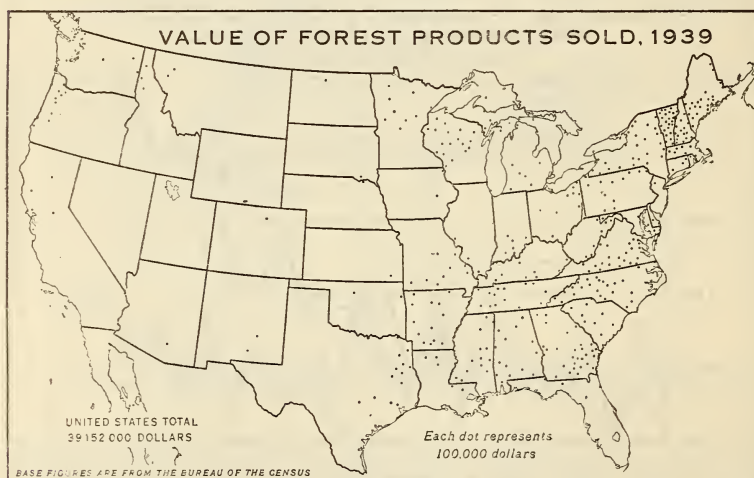
BAE 42433

FIGURE 161.—The index numbers of the production of apples, and citrus fruits show a slight upward trend from 1919 to 1929. From 1929 to 1934 the production of peaches and apples decreased slightly, whereas production of citrus fruit increased greatly. During the last 10 years, 1932-41, a heavy increase occurred in production of citrus fruits, whereas production of peaches increased moderately and commercial apple production fluctuated from year to year but remained at about the same level.



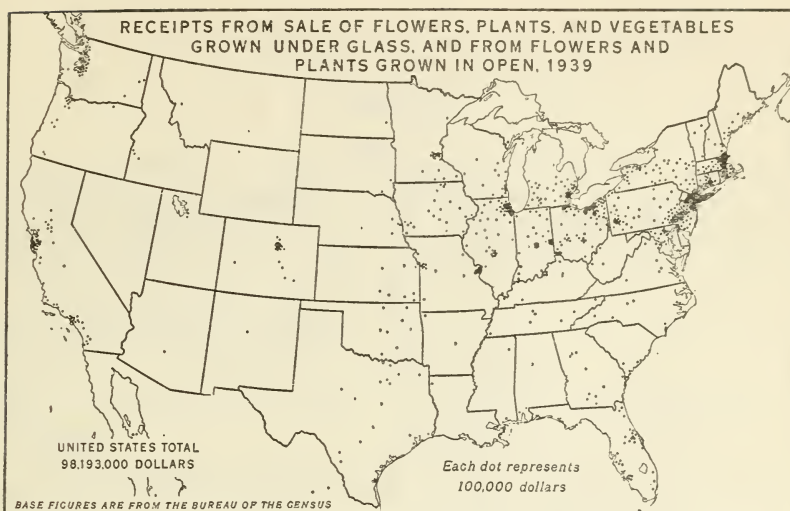
BAE 42146

FIGURE 162.—The most important areas for the production of cherries in the East are in western Michigan; western New York; and in Door County, Wis. California, Oregon, and Washington have the largest number of trees in the West. Western cherries are usually the sweet varieties, whereas in the East the sour varieties are generally grown. Figs are grown in warmer climates. More than two-thirds of the figs come from California in the form of dried, fresh, or canned fruit. The rest of the crop is grown in the Gulf States, North Carolina, and South Carolina.



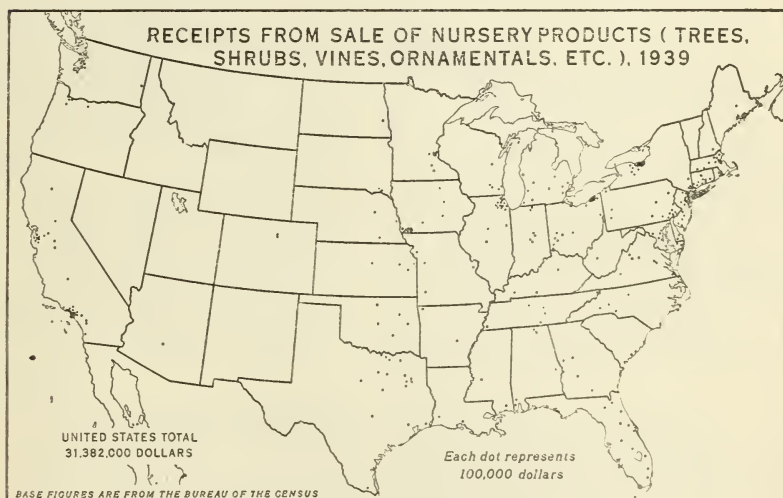
BAE 42342

FIGURE 163.—Farm forest products sold in 1939 came mostly from the Eastern States. The largest value of forest products came from Georgia; New York ranked second, and Virginia third. Farm forest products included value of sales of firewood, fuel wood, standing timber, sawlogs, veneer logs, pulpwood, mine props, tanbark, charcoal, fence posts, railroad ties, poles and piling, turpentine, resin, maple sirup and sugar, etc.



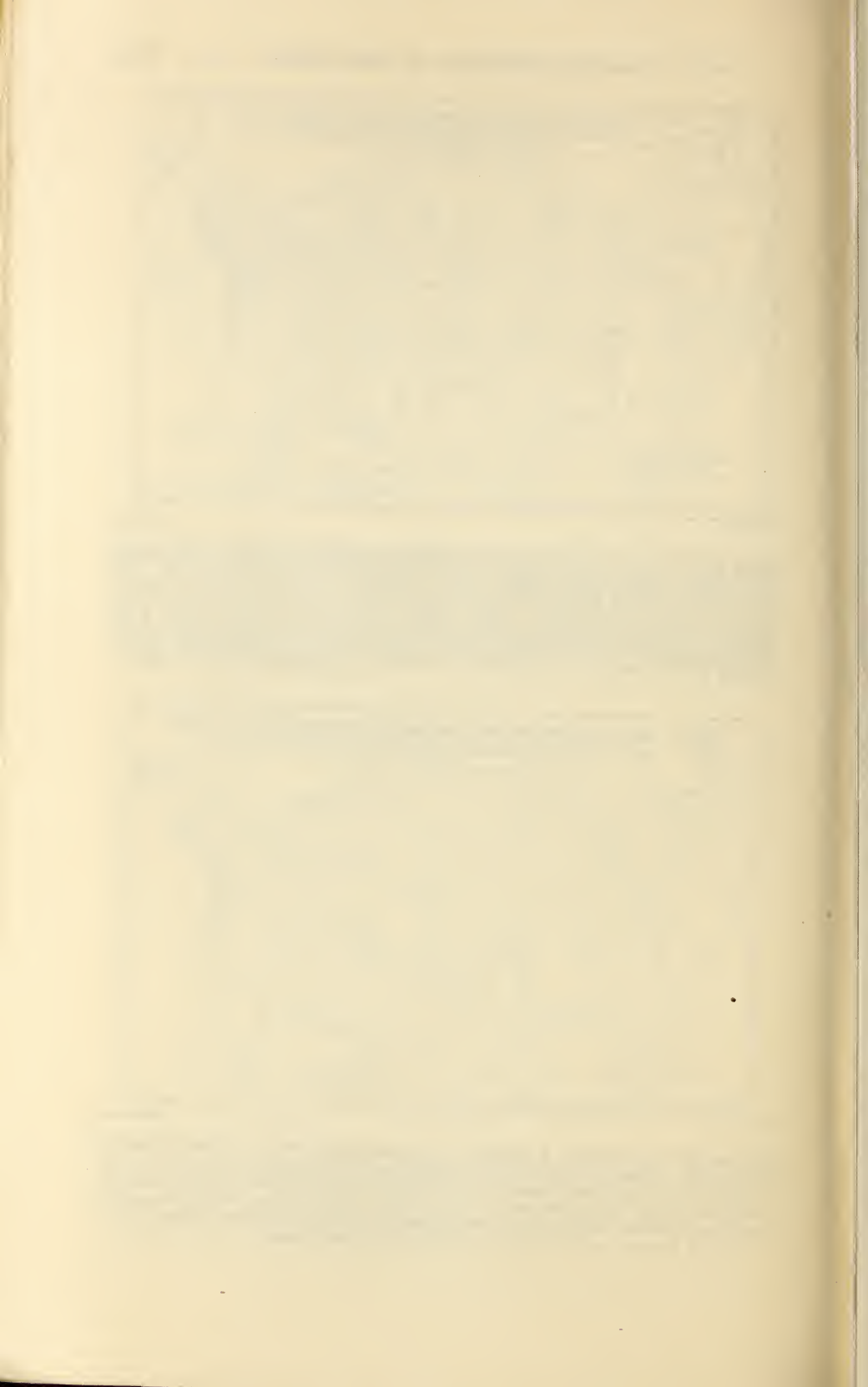
BAE 42341

FIGURE 164.—Receipts from the sale of vegetables grown under glass, and flowers and plants grown under glass and in the open, on 32,700 farms in 1939 amounted to nearly \$100,000,000. The receipts from New York were the largest and amounted to \$9,761,000, Pennsylvania was second with \$9,685,000. The crops reported by these two northern States were grown chiefly under glass, whereas California with its warm fertile valleys reported its receipts as almost evenly divided between crops grown under glass and those grown in the open.



BAE 43240

FIGURE 165.—In 1939 New York had the largest receipts from the sale of nursery products, amounting to \$3,575,000, mostly from the vicinity of New York and Rochester. California ranked second with \$3,567,000, derived mainly from the San Francisco Bay area and the vicinity of Los Angeles. Other important areas are in the vicinity of Philadelphia, Pa.; Cleveland, Ohio; Chicago, Ill.; St. Paul, Minn.; and in Fremont and Page Counties, Iowa.



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Beets (table), acreage, 1939	73	Small, cut for hay, acreage, 1939	44
Blackberries, and dewberries, acreage, 1939	97	Grapefruit, number of trees, April 1, 1940	93
Broccoli, acreage, 1939	74	Grapes, production, 1939	95
Broomcorn, acreage, 1939	37	Grapevines, all ages, number, April 1, 1940	95
Buckwheat, acreage, 1939	37	Guavas, number of trees, April 1, 1940	94
Cabbage, acreage, 1939	74	Hay—	
Cantaloups, acreage, 1939	75	acreage—	
Carrots, acreage, 1939	75	increase and decrease, 1929-39	40
Cauliflower, acreage, 1939	76	total, 1939	39
Celery, acreage, 1939	76	alfalfa, acreage—	
Cereals, discussion	12	in 1939	42
Cherry trees, number, 1940	100	increase and decrease, 1929-39	43
Clover hay, acreage, 1939	44	all other tame hay, acreage, 1939	46
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in 1939	13	Hemp, acreage, 1939	37
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acreage—			
in 1939	56		
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increase and decrease, 1929-39	26	production, 1939	54
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Onions (dry), acreage, 1939	78	Strawberries, acreage, 1939	96
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Peaches—		acreage—	
Number of trees—		in 1939	58
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production, 1939	87	1939	60
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Pear trees, all ages, April 1, 1940	90	production, 1939	65
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